

THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

GENERAL LITERATURE:—		THEOLOGY:—		PHILOSOPHY AND PHYSICAL SCIENCE:—	
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General Literature.

Rousseau. By John Morley. 2 vols. Chapman and Hall. 1873.

THIS is a much more serious attempt to meet a much more serious want than that to which the same author's companion volume on Voltaire was addressed. Voltaire's character can be understood without an interpreter: the story of his life has been told repeatedly; the substance of his most influential writings has passed long since into commonplace; the fascinating charm of his style may be acknowledged, but scarcely reproduced; and when all is said, we come back to the first and obvious conception of him as the brilliant embodiment of the wit and reason of an age that was sceptical of *gaieté de cœur*. With Rousseau the case is in every respect different. The influence, direct and indirect, of his writings is still being felt; while the writings themselves are so imperfectly known that its original source is often mistaken, and its future results miscalculated in consequence. His style, admirable as it is at its best, is weighted with matter harder to appreciate and easier to dislike than Voltaire's; and at the same time the most careful criticism of his works must be incomplete if it does not include an account of the incomprehensible personality that colours them so strongly; while such an account is scarcely to be met with in ordinary biographies, where the inner nature of the man himself is obscured to us by the mass of ancient scandal and modern controversy connected with nearly every act of his life. Mr. Morley has undertaken to make Rousseau better known on every side; as an original thinker, as a man of letters and genius, as a leader of thought—of thought promptly translated into action—and as a psychological problem; and as the task is proved to be possible, to candour and patience, its importance and use become increasingly apparent. With a wise discretion he declines to encumber the biographical portions with interminable attempts to reconcile the dates and other details given in the *Confessions*, with each other and with the statements of independent witnesses, or to determine precisely the rights and wrongs of Rousseau in each fresh quarrel with his friends. Accuracy on such points, even if it were attainable, would not substantially affect the general view of his character, for all his feuds were much alike in

origin, and their number makes it impossible to suppose him always the victim of injustice; while in other matters his own statement that he had once done or felt something could never be entirely unfounded, because living, as he did, in the impression of the moment, if he had not done or felt it at the time specified, it was yet as much a reality to him afterwards in imagination as it could be to saner men in memory. The only objection to this manner of treatment is that, while it preserves the general outlines faithfully, any particular inference suffers from the uncertainty of the fact on which it is based. Thus, for instance, Mr. Morley admits that Rousseau's residence at Les Charmettes may have lasted only a year and a half or a year, instead of four or five as he himself says, only adding that "a year may set a deep mark on a man." But it seems more plausible to suppose that Rousseau's character led him to dwell with disproportionate emphasis on an episode that was thoroughly congenial to his imagination, than that he should have been permanently influenced by a short and accidental relation which would only have been possible or significant to such a character as his.

In general we should say that Mr. Morley allows rather too much for the *milieu* and the effect of education and circumstance, and too little for that of native eccentricity of disposition and the congenital moral twist which, since it developed into actual insanity, we have neither motive nor reason for denying. Mr. Morley thinks this too easy an explanation of all that is abnormal in Rousseau's mental state, and is almost inclined to connect his mission as the champion of the condemned and oppressed with the existence of a sordid and contemptible side to his own character; but to remind us that the man whose flashes of divine inspiration set all Europe aflame was also the contented daily associate of Thérèse Le Vasseur, is just as likely to weaken our faith in the all-sufficiency of genius as to enlarge our charitable indulgence for the few common-place men who need as much as Rousseau. The bluntness of moral perception which made Rousseau indifferent to vulgarity in those nearest to him may help to account for what is worst in his writings, but has no necessary connection with what is good in his character. That there was good in his character Mr. Morley establishes by considerations which are both new and valuable. His happiest moments

were those passed in innocent idleness alone with nature or her uncivilized children; he had none of the vices that demand for their gratification the pre-existence of a complicated social organization; and it was this singularity—the fact that he did not want, and could not by any means learn how to occupy, a brilliant position in the society that he was to help subvert—that gave his paradoxes the earnestness and force of truth, and leaves a kernel of sincerity even to his affectation. His preference for homeliness and his power of frankly accepting life under quite irrational conditions, so long as the sensation of the moment was not irksome, were those of a child rather than a philosopher; but the vividness of his ideas stood, for himself and others, in the place of logic. As he could only think what he had previously felt, there was a strong element of arbitrariness, as M. Saint Marc Girardin pointed out, in the thoughts which proved so captivating to his contemporaries; but translated into theory, what was eccentric became original, and the fact that Rousseau could be content with a life like that of the people led to its being for the first time revealed to many that the people *had* a life, and that it was of some importance whether they were content with it or not. His morbid jealousy of patronage or dictation may be explained as the confused and querulous expression of just self-assertion; he says in the *Contrat Social*: “Toutes mes idées se tiennent, mais je ne saurais les exposer toutes à la fois,” and what is doubtful if asserted of his ideas is certainly true of his sentiments; the same instinctive misanthropy which made him an impossible friend and an execrable lover gave him a position outside the existing social order, from whence he could compass its destruction in the name of fraternal charity. If he had been less completely out of sympathy with the tastes and prejudices of the old world, even his potent imagination might have failed to contemplate such a complete reversal of them all as was realized, first in his writings, and then in the acts of his political disciples.

Still we cannot admit either that his genius partook of insanity or that the hallucinations which destroyed his private peace were merely the effects of ill-temper and bodily ill-health. Mr. Morley admits that in his quarrel with Hume the limits of sanity are clearly overpassed; but if it is madness to have the mind occupied in succession with contradictory impressions, some of which have no counterpart in reality, certainly Rousseau was not always sane during the latter part of his stay at the Hermitage. The patience of Saint Lambert, Madame d'Épinay, Grimm, and Didérot lasted longer than that of his English friends, because, knowing him better, they had had more practice in indulgence; but it was quite as severely tried. His only real grievance was that his friends, especially Didérot, insisted on knowing what was good for him better than he did himself, and sometimes conspired to benefit him after their own fashion instead of leaving him alone after his: Hume's first offence was of the same kind—having allowed Mr. Davenport to try and cheat his guest into paying less than its full cost for a post-chaise. In all practical matters Rousseau's intelligence was as weak as his impulses were strong, and if he felt himself hampered in the free development of the latter, he was never able to think of any other way of escape than by physically running away, or, if that was impossible, breaking out into impotent and venomous complaints. Mr. Morley is not one of Rousseau's apologists, but he points out both that the author of the *Discours sur l'Inégalité* had earned a right to live as he pleased, and that there was a certain fitness in his choosing to live by copying music. His comments on Rousseau's explanation of his own natural ingratitude suggest a general consideration that may help to extenuate the moral delinquencies of other

men of genius besides Rousseau. The emotions cannot be commanded at will, and when Rousseau was guilty of gross ingratitude to a former benefactor, the reason simply was that he no longer felt grateful; the benefit and the feeling it had excited at the time were past and gone, and his consciousness was filled with fresh and quite different impressions. If the claims of his own personality had been less exacting, he might have deferred so far to popular conceptions of what is becoming as to affect the virtues he had not got; but then he would not have been the Rousseau of the *Confessions*. Such peculiarities as his insensibility to past kindness are extremely unamiable, but from the moral point of view there is a distinction between blank incapacity to see a duty or to feel the justice of another person's claims, and conscious, voluntary disregard of them when recognized. Just as his resolve to be himself made him most conspicuously the man of his age, his vanity led him into candour which, in more ways than one, has had the effect of modesty: he not only makes the worst of his character by accepting and identifying himself with passing thoughts (such as his inheritance of Claude Anet's wardrobe) which, though they might occur to other men, would be thrown off at once as a vagary of physical association or suggestion not affecting the real self, but the very completeness of his absorption in the impression of the hour in its bearing on himself prevented his estimating the effects he was meanwhile producing upon others, and we should never have learnt from his writings, what is nevertheless a well-established fact, that, in his lucid intervals, people who did not send him game or prepay their letters found him an agreeable and amiable companion. Mr. Morley does not, of course, offer a cut and dried theory of so paradoxical a subject, but without omitting anything essential he has harmonized the incongruous features into as intelligible a portrait as fidelity to his perplexing original would allow.

With respect to the Discourses on the Influence of the Sciences, on Inequality, and the *Contrat Social*, the most useful thing to be done was to give an account of their substance, for they answer themselves to readers of the present day, while they have far too much historical importance to be neglected with impunity. Mr. Morley perhaps attaches too much weight to Rousseau's account of his studies at Les Charmettes and the singular plan on which he conducted his education, but taken merely as a statement that he was incapable of criticising the conclusions or reasoning from the data of other writers, it gives a true representation of his habits of thought both then and later. His reasoning consisted in a series of intuitions joined together with the sophistical ingenuity of passion, and no amount of instruction or method could have taught him to proceed differently. In judging his writings, therefore, the objective value of his conclusions is the only point to be considered, except so far as he is responsible for introducing the passion for neat paradox, in lieu of the neat truism of Voltairian philosophers, which has had so much influence on later French speculation. By confounding in his attacks on civilization the graces and the admitted defects of the existing social order, he struck the imagination, and even when his generalities were as unsound as those by which the *status quo* could be defended, they were not so easily refuted by an appeal to experience. Nothing can be easier than to show the historical unreality, or rather impossibility, of the “state of Nature” which he supposes, but the praise of such a state was the strongest blame of modern art and corruption, and if society has never been entirely self-satisfied since he wrote, his blundering consistent attacks on conventionality and luxury must have a large share of the credit. But in the *Contrat Social* he had got much further than this: we hear comparatively little of the

state of nature, and in fact Mr. Morley seems to do rather less than justice to his second thoughts by taking for granted that he supposed his imaginary contract to have been entered into by persons living in that imaginary state. In the later work he admits, with the instinct which so often makes him unconsciously profound, "la famille est donc, si l'on veut, le premier modèle des sociétés politiques"—a concession to history which neutralizes the effect of his introductory metaphysical flourish, "Man is born free, yet is everywhere in chains." Obviously it is not "Man," but babies that are born, who grow into men under conditions which do not, as a rule, fit them to claim at maturity the freedom which cannot be denied to those able to take it. But the significance of Rousseau's new gospel of the sovereignty of the people was independent of historical theories respecting the origin of political societies and the lawful basis of governments. It lay rather in his present and vivid belief that every state still was, actually and necessarily, an association of beings of the same kind, maintained with the consent, tacit or expressed, of all its members. Revolutionary democracy was implied in the conception of Louis XV., a duke, a philosopher, and a starving peasant as parties to the same act of acquiescence; but history promptly put the theorist in the right by proving that the peasant could break the compact when he chose as easily as the king. Mr. Morley criticises the destructive, anarchic tendencies of the doctrine, but the most stable governments are not those which are independent of the consent of the governed, for there are none such, but those in which the consent of the governed is most unreserved and unanimous. To secure the consent is a matter of art rather than science, and Rousseau has little that is valuable to say about the organization of society; but he was the first to penetrate below the surface of actual or possible social forms to the essential principle of association, and though the right of the strongest to rule had often been maintained before, he threw an entirely new light upon the question who was the strongest. He does not distinguish clearly between the sovereignty of the people and respect for individual freedom; but he at least sees farther into the matter than Voltaire, who thought only of the latter. Even in a passage—which Mr. Morley condemns as arithmetical quibbling—in 'praise of small states, he is only forestalling Mill and De Tocqueville on the tyranny of democracies, though he failed to allow for the influence of tradition in forbidding coercion, except by means of public opinion. It would perhaps have enlarged the scope of the work unduly, but we should have been glad if, after tracing Rousseau's obligations to Hobbes, Mr. Morley had devoted a chapter, instead of two or three pages, to indicating the extent of his influence on political speculation in England as compared with France, and the point at which the current diverged into the separate channels of political revolution and socialistic reconstruction.

A similar distinction must be drawn between the two lines or branches of his literary descendants. In the chapter on *La Nouvelle Héloïse* Mr. Morley accounts for the curious fact that Châteaubriand, Lamartine, and the royalist-religious reaction generally drew its inspiration from Rousseau by the presence of a constructive side in his revolutionary sentimentalism. It is true that he was moral compared with Crébillon and Diderot, pious compared with d'Holbach and Hébert; yet at the time of its appearance *La Nouvelle Héloïse*, in spite of its praise of the family and its pictures of pastoral felicity, was not considered an edifying work; like *Le Contrat Social*, it was too ingenious to be safe; and though Châteaubriand only borrowed its rhetorical fervour, and turned his sophistical skill into quite unexceptionable channels, the next generation relapsed into utter law-

lessness. Rousseau's *Héloïse* and *Emile* are a part of the history of Romanticism from its first outbursts after the restoration of the Bourbons to its latest English echoes. Of *Emile* there is not much that is new to be said. Mr. Morley "improves" the Savoyard Vicar in the interests of Positivism; but in this even more than in the other works the general principles and practical recommendations are of much less value than isolated remarks; and he might have given Rousseau credit for not a few phrases which, with a more consistent thinker, would be unmistakable indications of *positivité*. To those who know little or nothing of Rousseau at first hand, Mr. Morley's full and accurate account of the man and his writings will be invaluable. His most zealous admirers might perhaps object that his moments of profound insight and the beneficial effects of his influence are not rated at their highest value; but even they will be grateful for a candid and discriminating appreciation of an author who greatly needed an interpreter. EDITH SIMCOX.

Hilario Ascasubi. Obras completas.—Primer Volumen, Santos Vega, ó los Mellizos de la Flor, Rasgos Dramáticos de la Vida del Gaucho en las Campañas y praderas de la Republica Argentina (1778 a 1808). Segundo Volumen (de 1853 a 1865). Aniceto el Gallo, y otras Poesías Inéditas. Tercer Volumen (de 1839 a 1851). Paulino Lucero, ó los Gauchos del Rio de la Plata. Paris, in 8vo, 1872. Imprenta de Paul Dupont.

Of all the Argentine poets Don Hilario Ascasubi is certainly the most popular, and I may add the most worthy of being known. During the forty years and more that he has written, his reputation has grown and spread increasingly; his patriotic poems, *cañas, cielos*, are still as generally sung in Buenos-Ayres as at the time of their first appearance. The only edition in which they have been hitherto collected, and that in an incomplete manner,* has long been exhausted, and I do not like to mention the exorbitant price I was obliged to give for a copy of it in Montevideo. The new one forms three volumes in 8vo, the first of which contains a long poem, *Santos Vega; or, The Twins of Flower-Farm*. The second is filled by the *Songs* published in 1853, and the third by several articles in prose and in verse selected from a satirical journal, *El Gallo* (The Cock), where they appeared about the years 1853-1858.

It is a common fault with most of the Spanish-American poets to want, I do not say political, but *poetical* nationality. But for the accident of their birth and the uses of geographical and botanical names such as *Uruguay, Buenos-Ayres, chirimoyo*, for *Tage, Cadiz*, and *jasmin*, they would be true Spanish writers, not American ones, so admirably do they contrive to forget the manners and the tongue of their country. With M. Ascasubi no one can complain of a want of originality. From the very first verse of his poems one feels transported in a world wholly *un-European*, but for all that entirely the reverse of conventional. It lives a life of its own, is moved and led by impulses and motives of its own, and even speaks a tongue of its own, that which we hear spoken not only by the Pampa farmers and *peons*, but also with more elegance and an attempt at classicism by the more refined denizens of Buenos-Ayres and Montevideo. There are some phonetical alterations in it, some substitutes of new meanings and new words for old meanings and old words, some highly flavoured idioms which are calculated to puzzle at first the reader not previously acquainted with them: so great indeed and so many are its peculiarities that the purists of modern Spain cry out at its barbarisms, unjustly as I think. This Argentine vernacular is a form of Spanish other than the Spanish of Spain, but as legitimately

* Under the title of *Trozos de Paulino Lucero*. Buenos-Ayres, 1852. 2 vols. in 8vo.

drawn from the tongue of Ercilla and Cervantes as any dialect spoken nowadays from Algeiras to St. Sebastian. Only since the time it went out to America it had such new ideas to embody, such new sensations to express, such new aspects of scenery to describe, such new manners and customs to reflect, that it had to throw off many of its old habits and to develop itself into new shapes it would never have assumed in the mother country. Such as it is now, it has been made to smell so strongly of the soil upon which it grew as to recall instantly to the mind by the picturesqueness of the words the picturesqueness of scenes seen long ago and never to be forgotten by any one who has looked upon them.

Nowhere can this special form of Spanish be so perfectly studied as in M. Ascasubi's works. First as an officer in the navy, and later as officer in the army, M. Ascasubi from the time he was a lad of twelve or thirteen was brought into contact with the people whose language he writes and whose customs he pictures. He finally so identified himself with the Gauchos that he became himself a Gaucho. He it is who, under the names of Jacinto Amores, Ramon Contreras, Ruperto Flores, Paulino Lucero, narrates in the *Trozos* the various episodes of the great siege of Montevideo by Juan-Manuel Rosas and Oribe, celebrates the exploits of the *Orientales* chiefs, Rivera, Pacheco y Obes, Lavalle, even Garibaldi and his Italian guerillas, then in the service of the Republic of Uruguay. He again it is who, under the name of Aniceto el Gallo, pursues with his sarcasms Don Justo Jose de Urquiza, Rosas' conqueror, and all the statesmen who in 1853 attempted to rob Buenos-Ayres of its title of capital of the Argentine Republic. He it was lastly who, assuming the name of *Santos Vega el Payador* (The Improvisatore), tells the adventures of the Twins of Flower-Farm, and describes the habits of the Gauchos.

It is especially in this last poem that one can admire the many and various talents which have won for the works of M. Ascasubi their well-merited popularity. This poem fills as many as five hundred pages, and contains at least ten thousand lines. Thus when I opened it it was with some feeling of hesitation; but after reading the first part I got so interested that I could not help reading the whole from end to end without interruption. It is the history of twins, one of whom becomes a rich farmer and the other a bandit, from their birth until the death of the bandit. Round these two main personages are admirably grouped the other numerous characters of the Argentine society of the last century: the titled colonist, who lives in his *hacienda* like a prince in the midst of his subjects, his wife, their son devoted to the Church from his childhood, all three full of *bonhomie*, and uniting to their manners of *grands seigneurs* and Spaniards a great benevolence and affection for all the people of their household, whatever they may be; the young girl of the Pampas Azucena and her Gaucho lover; an old judge crammed with Latin, and an old rogue of a *pulpero*; a European soldier, bragging and boorish; and lastly, as a contrast, a Gaucho of our own time and his wife, to whom old Santos Vega is supposed to tell of the Gauchos of the past. Each of these personages speaks the language suited to his character with so much spirit that often in reading their words I fancied I was listening again to fragments of conversation heard long since in the same country. Once Lafontaine was asked how he managed to attribute to the creature-heroes of his fables language so appropriated to the nature and habits of each. "Oh!" said the *bonhomme*, "I put myself into their skins, that is all." M. Ascasubi has found out how to put himself into the skins of his personages. Those who wish to obtain an idea of the rural life of Río de la Plata without leaving their arm-chair have but to read Santos Vega: as they close the book they will

know it as it is, or rather as it was some thirty years ago. European immigration, the innovations of high roads and railways, and above all the long wars, both foreign and civil, which have passed over the country since the time when M. Ascasubi's heroes lived, have deeply altered the race and changed its customs. The Gauchos are disappearing as the trappers and Indians of Cooper have disappeared. Fifty years hence they will be a type entirely foreign to the country which still owns them at this moment, and Santos Vega appearing in the streets of Buenos-Ayres or Córdoba will produce the same effect as if Leatherstocking were to stalk through New York or Albany. Thus the work of M. Ascasubi, besides its poetic merit, is an historical document of the highest importance; it contains the picture of the manners of the heroic age, or that which an American writer ingeniously named *the homeric antecedents of the Argentine nation*. The historians of the future will find in his poems the portrait admirably drawn of an extinguished race, whose faults are often exaggerated, but whose noble and generous qualities cannot be too highly praised.

G. MASPERO.

THE NUT-BROWN MAID.

To the Editor of the ACADEMY.

SIR,—I venture to trouble you with a suggestion as to the proper way of understanding some parts of the beautiful old ballad, "The Nut-brown Maid." The point is how the poem is to be distributed among the interlocutors, and whether the poet speaks in his own person. The date of the "Nut-brown Maid" is uncertain. In Prior (see below) it is titled "A Poem Written Three Hundred Years Since," i.e. in 1418. This is probably too early; but on the other hand the poem seems older than the oldest copies, and may have been corrupted by oral recital. It was first printed in *Arnold's Chronicle*, a book supposed to be of date about 1502. A MS. belonging to Balliol College contains *inter alia* a copy of the poem, at the end of which is added, 'Explicit, quod Richard Hille,' of about the same date, but not exhibiting so good a text. The text of the Balliol MS. will be found reprinted in Messrs. Hales and Furnivall's edition of Bishop Percy's Folio MS., vol. 3. Prior, in his poems, first published in 1718, prefixes to "Henry and Emma" a fairly good version of the ballad, minus the last stanza. According to Bishop Percy (*Reliques*, vol. ii.), Prior found this in the *Muses' Mercury* for June, 1707, where the poem was first revived, but which I have not seen. "Henry and Emma" is a half-story, half-dialogue, founded on the "Nut-brown Maid," of which it paraphrases parts. Regarded as an imitation of Dryden's Fables, it displays great rhetorical force and dexterity of verse; but Prior's couplets and triplets fall very frigid after the simple directness of the older poem. One line survives, a little altered, as a familiar quotation; "fine by degrees, and beautifully less:" which is said of a lady's waist. In Percy's Folio MS. a very incorrect copy appears. In Chalmers' Johnson's *Poets*, 1810, vol. x., among Prior's works the "Nut-brown Maid," with the last verse, is prefixed to "Henry and Emma." And lately Mr. Skeat has given the poem in his excellent *Specimens of English Poetry*, from Arnold's text, with variants, chiefly from the Balliol MS.

Now how have these various editors understood the twofold division of speakers? Arnold's is the best text. Where Hill varies from him, it is upon the whole for the worse. Percy's version is wretchedly debased. The copies included in Prior's works do not seem to have any independent tradition. Arnold's original edition I have not seen; but in Douce's reprint, which I presume to be made *litteratim*, the poem is given in eight-line stanzas, without farther divisions of any kind. The best text therefore leaves us to allot the parts at our discretion. The Balliol MS. marks the interlocution in the margin, beginning at st. 4, where he has "Puella," to whom "Squyre" replies. St. 15, 17, 18, 23, 24, 26, 27, 30, have no mark of speaker. Apparently the writer considers that the first three stanzas and the last belong to the poet. But he may have written in these marginalia carelessly as he went along, considering the

want of uniformity with which they are employed. In Prior, ed. 1718, "Man" and "Woman" are distinguished, the man beginning at

"I am the knyght, I cum be nyght."

After this the verses are given to Man and Woman alternately, the man concluding with

"Thus have ye wone an Erlie's Son, And not a banishyd man."

So that he seems to divide as Hill does. In Chalmers the stanzas are marked *ab initio* "A" and "B" alternately, which I conceive to be the right way. Mr. Skeat gives the introduction, *i.e.* all down to "I am the knyght," to the poet, and I presume the conclusion also.

But it seems to me that the proper way to understand the poem is this: that it is a dialogue *ab initio* between two persons, male and female, who plead the cause of their respective sexes. The speeches of either end all through with the words "banished man" and "alone," the rest of the lines being modified according to the context. The first speaker (the man) begins with the familiar complaint of the faithlessness of woman. In stanza 2 the woman allows this to be a common accusation, but pleads instances on the other side, and notably the "nut-brown maid" (as if this had been a well-known name from some previous ballad or the like):

"I say not nay, but that all day it is bothe writ and sayde
That womans fayth, is as who saythe, all viterly decayed;
But neuertheles, right good wittnes in this case might be layde
That they loue trewe, and contynew; recorde the nutbrowne maide,
Whiche from her loue, whan, her to proue, he cam to make his mone,
Wolde not departe, for in her herte she lound but hym allone."*

"I say not nay" is surely the answer of a second speaker, allowing that there is something in what has been said, though it can be refuted; and so below, in stanza 12, the Nut-brown maid assents to her lover's statement by saying—

"I thinke not nay, but as ye saye, it is noo maydens lore."

The first speaker then answers; very well; suppose we assume the persons of these two, the Nut-brown maid and her suitor, and speak for them:—

"Than betwene vs lete vs discusse, what was all the maner
Be-twene them too; we wyl also telle all the peyne in-fere
That she was in; now I begynne, soo that ye me answere.
Wherefore alle ye, that present be, I pray you geue an eare:—
I am the knyght, I cum be nyght, as secret as I can,
Sayng; 'Alas, thus stondyth the case, I am a bannished man.'"

To which the lady answers: "I accept the proposal, and will speak for the Nut-brown maid:—

"And I, your wylle for to fulfille, in this wyl not refuse,
Trusting to shewe, in wordis fewe, that men haue an ille vse
To ther owne shame, wymen to blame, and causeles them accuse;
Therefore to you, I answere now, alle wymen to excuse:—
'Myn owne hert dere, with you what chiere? I prey you telle anoon,
For in my mynde, of all mankynde, I loue but you allon.'"

After this the dialogue goes on regularly till the last stanza, 30, which is the speech of the female speaker after the conclusion of the imaginary dialogue:—

"Here may ye see that wymen be in loue meke, kinde, and stable,
Late never man reпреuе them than, or calle them variable;
But rather prey god that we may to them be comfortable,
Which somtyme prounth suche as he loueth, yf they be charitable;
For sith men wolde that wymen sholde be meke to them echeon,
Moche more ought they to god obey, and serve but hym allone."

The composer, therefore, never appears at all in his own person. There is but one difficulty on this hypothesis, and that is the words of the first line,

"Be it right or wrong, these men among, on women do complaine."

"These" men comes rather awkwardly from the mouth of one who is speaking for the male sex. As none of the texts are very much to be relied on, could we read "we" or "wee" men? The difference in

old writing would be little or nothing. Not impossibly "these" might be the mistake of some one who conceived the poem to be a woman's work. Bishop Percy in a MS. note in his folio suggested this, and Mr. Skeat mentions it as not unlikely. But Percy's conjecture seems simply to rest on the very corrupt reading of the last stanza he found in his MS.; and I cannot say that I see any trace of a female hand in the poem, my supposition of a female interlocutor being once allowed. Would a woman author have made the heroine such a very pliable Griselda?

Balliol College, Oxford.

J. PURVES.

THE GAELIC SOCIETY OF INVERNESS.

THERE has been started two years ago in the Highlands of Scotland a literary society whose exertions deserve to be noticed and encouraged, the "Comunn Gailic Inbhir-Nis." Although a *Commune* by its name, it has nothing in common with the Paris Commune, and it is of a merely literary and conservative character. The objects of the society are clearly exposed by their constitution: "The objects of the society are the perfecting of the members in the use of the Gaelic language; the cultivation of the language, poetry, and music of the Scottish Highlands; the rescuing from oblivion of Celtic poetry, traditions, legends, books, and manuscripts; the establishing in Inverness of a library, to consist of books and manuscripts, in whatever language, bearing upon the genius, the literature, the history, the antiquities, and the material interests of the Highlands and Highland people; the vindication of the rights and character of the Gaelic people; and, generally, the furtherance of their interests whether at home or abroad."

That is a wide and promising field, and it is very satisfactory to see the Gaels of Scotland take into their hands the cause of their too long neglected literature and history. It is true that the Gaelic language may die one day or other. In our modern Europe, where no nation can any more live isolated, it is the unavoidable fate of all nationalities which have no political existence and whose representatives do not number by millions. Yet it is the duty of those whom nature has made heirs to an ancient and glorious history, and who are the last offsprings of a noble race, to cling to what is their nearest fatherland. With that feeling of pious duty to the past the members of the Gaelic Society have gone to work. They hold meetings, where papers are read and lectures delivered, and the business is carried on in Gaelic every alternate night. They have also an annual meeting, when competitions for prizes take place in pipe and other Highland music, and in Gaelic poetry. Lastly, they publish transactions.

The first volume has just been published (*Transactions of the Gaelic Society of Inverness*. Vol. i. Year 1871-1872. Inverness: Printed for the Society by William Mackay. XV.—127 p. in 8.) It has for its motto the old saying: *Clann nuan Gaidheil ri gaillean a'cheile*, "Clan of the Gaels with shoulder to shoulder." It contains the constitution and the history of the society, the proceedings of the first annual assembly, papers and pieces of Gaelic poetry which have been read in the ordinary meetings. Some of the papers and addresses are in Gaelic. On p. 110 will be found a Gaelic translation of *God save the Queen* by the society's bard, Mr. Angus Macdonald, which was sung at the first annual meeting, and we willingly believe that "the surprise was pleasing and the effect grand." The chief papers are the following:—Local Topography, by Alexander Mackenzie; the Clan System, by John Murdoch; the Legends of Glen Urquhart, by William Mackay (in Gaelic); the Forty-Five, by Charles Mackay (in Gaelic); Survey of the Celtic Language, by the Rev. William Ross; the Highland Clearances, by John Macdonald; Notes on the History of the Gaels, by Lachlan Macbean; Nationality, by Professor Blackie. In perusing these papers we have been surprised to see how little known in the upper north are the works of the continental Celtic scholars. Zeuss' masterly work, the *Grammatica Celtica*, which is the very foundation-stone of all Celtic philological researches, is mentioned only by the Rev. William Ross, who pays a pious tribute to the father of Celtic philology. Mr. William Ross is well informed, and we are sorry to miss in his "survey" Chevalier Nigra's publications. But it would be unfair to criticise too severely the new-born and yet so promising society. We shall only ex-

* The quotations are from Mr. Skeat's text, omitting the italics, etc., as beside the present purpose.

press the wish that in their future volumes more room should be given to original texts, *i.e.*, popular music as well as historical documents, collections of proverbs as well as unedited literary works, &c. We know it is one of the objects of the society; and we have their promise in the introduction: "The Highlands owe it to the world of letters and philosophy that whatever the Gaelic language, traditions, legends, poetry, sentiments, and philosophy contain which is of value should be preserved by those who know them, and handed over as valuable contributions to the stock of materials out of which human learning must be built up." H. GAIDOZ.

Notes and Intelligence.

In reference to a statement in a recent number implying that Dr. Newman had for some time been editor of the liberal Catholic journal called the *Rambler*, which was started five-and-twenty years ago, the Rev. J. M. Capes writes to us that Dr. Newman never edited the *Rambler*, and though an occasional contributor to its pages, never identified himself with its opinions. Mr. Capes remained its editor and proprietor for several years, when he transferred it to Sir John (now Lord) Acton, by whom it was transformed into the *Home and Foreign Review*, which lived a few years, and was finally crushed by the condemnation of the English Roman Catholic prelates. The *Rambler* early found itself in antagonism with some of the Roman bishops, especially through its exposure of the defective condition of the education given in the Roman Catholic colleges. Its success, however, was considerable, until its increasing liberalism of tone and independence drew on it the open hostility of Cardinal Wiseman and other prelates who dreaded its influence upon clergy and laity alike.

The death of Doña Gertrudis Gomez de Avellaneda (b. 1816) was announced in February; she was favourably known in all Spanish-speaking countries as a poetess, and her plays, if not remarkable for originality, were uniformly successful on the stage.

A Swiss paper states that Professor Coindet has presented the public library of Geneva with a complete MS. of Rousseau's *Emile* with notes and corrections in the author's own hand, and one hundred original letters, also of Rousseau's, some of which have never been published. The MS. remains of A. W. Schlegel, which have been already utilized by historians of German literature, have been purchased by the Royal Library of Dresden: It is reported that a MS. of eighty-four pages, by Copernicus, has been discovered at Thorn.

The experiment tried some thirty years ago, under Tieck's direction, has just been repeated at Munich, where the *Antigone* of Sophokles, with Mendelssohn's music, has been produced at the *Hoftheater* with strict classical correctness and severity. The attendance at each performance was large, but it is said not enthusiastic.

The publication of *Neue Mittheilungen aus J. W. von Goethe's handschriftlichem Nachlass* is announced. It will include "Goethe's Scientific Correspondence," arranged by himself, and extending from the year 1812 to 1832, which will occupy two volumes; and "Goethe's Correspondence with the brothers Von Humboldt," in one volume. The letters exchanged between Goethe and Wilhelm v. Humboldt from 1795 to 1832 will form a series of the highest interest and importance.

In the *Revue des deux Mondes* (March 15) M. Alfred Rambaud gives some interesting information about the recent development of female education in Russia. Its extremely democratic character, and the eagerness with which women of all classes engage in teaching as a profession, are fresh points of resemblance between the Empire and the United States. The education given seems to be thorough as far as it goes, but we cannot tell to what extent the Russian lady who has just taken a doctor's degree at Leipzig University "cum laude" is a fair representative of the students at the public schools or gymnasia of the Princess Mary described in the article.

Amédée Thierry, the historian, died at Paris on the 27th ult.

The great Norwegian poet Ibsen, whose works are just now beginning to be known here, has finished a poem which promises to be very important—a trilogy on the history of Julian the Apostate. The subject is treated in a satirical and essentially modern manner.

Art and Archaeology.

A Concise History of Painting. By Mrs. Charles Heaton. London: Bell and Daldy.

MRS. HEATON made her first appearance in literature with a biography of Dürer. She now makes her second with a concise history of painting. Between biography and history there is a great and important contrast, which becomes still more marked as the latter requires more conciseness. It is a question whether the skill of the biographer and the terseness of the historian can be found united in one person. Mrs. Heaton certainly is more concise in her matter than in her style; and it is probable that nature and education have fitted her better for biography than for history. Yet she brings to her task a large acquaintance with the general literature of art, a cultivated taste, and an amount of experience sufficient to enable her to colour in original tones many of the observations which she has to make upon the masters of the many schools to which her attention is directed. Her narrative power is of that lightness and delicacy which are peculiar to women; a flash of genuine enthusiasm embellishes some of her recitals; and the tale is frequently freshened by a playful undercurrent of humour.

The difficulty of combining conciseness with the usual qualities demanded of an historian are extreme. Mrs. Heaton's treatment in this respect gives us cause to inquire whether art history can bear the sort of conciseness which she affects. The general reader may not have reason to complain; but the student will ask how it is that whilst we trace the broad stream of art in every country, the tributaries are invariably left out. The early periods of local schools in Italy are omitted everywhere but at Florence. There is no Paduan or Veronese painting before Mantegna; and we miss the remarkable revival of Altichiero, Avanzi, and Vittore Pisano. At Milan, Foppa, Suardi, Buttinone, and Zenale are ignored in the earlier, Borgognone in the later, period; and Luini or Beltraffio are presented to us merely as pupils of Da Vinci. The Bolognese and Ferrarese are not considered worthy of study till the time of Francia and Gaudenzio. Perugia yields nothing of interest till Perugino comes. Local craftsmen are of no account in Friuli or Piedmont; at Genoa or Pisa, at Arezzo, Parma, Cremona, Pavia, Bergamo, Lodi, Treviso, or Vicenza. The narrative probably gains in general picturesqueness in proportion as the minor details are concealed; but the value of the work to a certain class of readers is in a similar proportion diminished.

Mrs. Heaton has thought it worth while to revive the spectre of Byzantinism, which haunted the pages of history so unnecessarily and so long. It is a pity that she should have done so, for it is not true, though it has been held, that Byzantine art "took the place of the feeble classic-Christian, and is found triumphant in the later works of the catacombs." There is no sufficient foundation for the broad assertion that "all the artists of the eighth century were monks;" and surely it is an error of magnitude to assume that "Leonardo's divine face of Christ is but the perfect development of the type founded at Byzantium." There are abundant materials at our command to prove that Byzantium was frequently indebted to Italy for artists; and it is possible at

different periods to discern the difference between the form and execution of the Levantines and those which distinguished the genuine Italian.

When painting first revived some portion of its progress was due to the earlier efforts of sculptors; and here a prominent place is justly assigned to Niccola Pisano, who worked with so much efficacy for "the rise" in the thirteenth century. A hundred years later Uccelli, Masolino, and Masaccio owed a great deal more than has been usually conceded to Ghiberti, Donatello, and Brunelleschi; but here Ghiberti, and Ghiberti alone, is considered "the herald of progress," whilst little or nothing is said of Donatello, whose example led to a revolution at Venice, produced Michael Angelo at Florence and ushered in Mantegna at Padua.

Amongst the names which it would be vain to seek in the pages of this history are those of Baldovinetti and Pesellino. Others of equal note are introduced by mere accident into the narrative—that of Castagno in connection with the fable of Domenico Veneziano's murder, that of Piero della Francesca in conjunction with Uccelli's as a master of perspective. All and each of these artists might have been named as party to the reform of the tempera method in Tuscany, and it was incumbent on the historian to show how oil painting was carried to perfection by the joint efforts of these men, whilst it was only introduced into Venice forty years or more after the death of John van Eyck by Antonello da Messina. If there be a bald spot in the "concise history" it is that which treats of the invention of oil medium by the Van Eycks; and if injustice is done anywhere in those pages, it is more particularly so where the author treats of Antonello, who has the misfortune to lie under her displeasure almost as strongly as the "angelic" Fra Giovanni da Fiesole. Here and there we may notice a casual blemish, such as that at page 118, where Costa is made to appear as the pupil instead of as the master of Francia; or at page 129, where Titian's "Diana and Calisto" at Bridgewater House is described as a copy of the original at Madrid; whereas the canvas at Madrid is a copy of that of Bridgewater House. Other mistakes must be assigned to the difficulty which any person writing in England encounters in the endeavour to become acquainted with the latest sources. There is a torpor with us in this respect which is not paralleled in any country in this hemisphere; and it is probably due to the difficulty of looking abroad for such things that Mrs. Heaton has failed to ascertain the following facts:—

Niccola Pisano was born in 1268, and not in 1280.

The earliest Florentine painter of note is not Tafi, but Margaritone, whose span of life extended not, as Mrs. Heaton believes, from 1236 to 1313, but from 1216 to 1293. Tafi, whom she supposes to have been born at the beginning of the thirteenth century, was still alive and in practice in 1320.

Gaddo Gaddi, according to her chronology, came into the world in 1239 and left it in 1312; the real dates of these events are 1259 and 1332.

It has never been denied that Guido of Sienna painted the Madonna of St. Domenico; but it has been proved that the principal figures were re-painted by a later artist, and it has been shown that the date of 1221 cannot be maintained, and must give place to one much nearer the close of the thirteenth century.

The poetic anecdote of Cimabue's meeting with Giotto by the roadside is to be consigned to the same limbo as that of Romulus, Remus, and the she-wolf. The anonymous commentator of Dante tells us how Giotto's father apprenticed his son to a woolstapler at Florence; how Giotto, like many other boys of his age and time, played truant, and how when looked for he was found in Cimabue's shop.

It was not Boniface VIII. but Benedict XII. who sent

a courtier to Giotto to ascertain his skill; and the result was an invitation to Giotto to visit Avignon, which he would have done but for Benedict's sudden death.

Masolino, who lived much longer than any one hitherto has supposed, was still in existence in 1447. Masaccio's birthday was December 21, 1401. Gozzoli's death is no longer uncertain; it occurred in 1498. Botticelli was not born in 1437, nor did he die in 1515; the dates are respectively 1447, and May 17, 1510. Antonio Pollaiuolo's birth was registered in 1429, not in 1430; Pier di Cosimo's in 1462.

There is nothing more touching than the account given in contemporary registers of the death of Domenico Ghirlandaio. He was seized with an attack of the plague on the 7th of January, 1494, which carried him off in four days; and such was the fear of infection prevalent at the time that the painter's body was consigned at midnight to the brotherhood of St. Paul, to which he belonged, and was secretly buried in the dark in the family vault at Santa Maria Novella.

Lucretia Buti, the nun and mistress of Fra Filippo, is a myth; but Fra Filippo did clandestinely obtain the affections of Spinetta Buti, a school pupil in a convent at Prato, and by her he had Filippino Lippi in 1457. On the 18th of April, 1504, Filippino died, and the pious registrar of S. Michele Visdomini, at Florence, added to the entry of his death, "Idio gli perdoni."

If we leave the Italian schools for the sake of turning to the more grammatic ones of the Netherlands, we find but little alteration in Mrs. Heaton's treatment. The statement that blood-streaming crucifixions and disgusting martyrdoms were favourite subjects at an early period in Flanders requires to be confirmed by some authority. That Flanders and Germany had an art of their own from a period coeval with the reign of Charlemagne is known; but this apparently does not interest our author, whose slight allusion to Broederlam is insufficient to give even a clue to the activity of artists in the fourteenth century. Some very old errors are repeated, such as that Hubert van Eyck was affiliated to the guild of St. Luke at Ghent in 1412; that John of Liège recommended John van Eyck on his deathbed to Philip of Burgundy; that John van Eyck exhibited a head of Christ at Antwerp in 1420, and took Roger van der Weyden as his apprentice. Not a word is said of Roger's birth and education at Tournai, not a syllable of Gerard David's existence; Memling's life is sketched without an allusion to the altar-piece of Danzig; and the claims of Justus of Ghent to a high place amongst the Flemings who wandered to Italy are ignored.

The Holbein question is treated without reference to the changes produced by criticism within the last few years. It may be that there is ground for assigning to Sigmund Holbein the portrait of the National Gallery, though it would be desirable that these grounds should be stated. It is still competent to a critic to hold, as Mrs. Heaton holds, that the Darmstadt and Dresden Madonnas are by one hand, though it may be safe to predict that the existence of such a critic will soon be as rare as that of the dodo. It is no longer possible for any historian to speak of pictures of 1512 as being by the younger Holbein, all such pictures being now fully proved to have been executed by the younger Holbein's father.

J. A. CROWE.

ART NOTES.

Herman Grimm has recently published a short pamphlet entitled "Zur abwehr gegen Herrn Professor Dr. A. Springer's Raphaelstudien in der Zeitschrift für bildende Kunst; Heft 3." In reviewing Herman Grimm's recent work, "Das Leben Raphaels von Urbino," Professor Springer (see *Academy*, Vol. iii., p. 445) took occasion not only to criticize severely the work

itself, but to make what looks like a personal attack upon the author couched in somewhat unmeasured terms. Professor Springer's position is so prominent and his credit so considerable that Dr. Grimm has felt obliged to take special notice of the attack made upon him. In the above mentioned pamphlet he meets one by one to the number of fifteen all the positive accusations of negligence and inaccuracy which have been brought against him by his critic. What appears to us to be the worst feature of the case is that while Professor Springer has fastened with tenacity on what may be described in the main as slips of the pen and oversights, he has preferred to let alone the really considerable points at issue, which have been carefully noted by Mr. Crowe (see *Academy*, No. 61, pp. 445-46).

The event of the season in the London auction marts has been the sale of three Sèvres china flower-pots of the kind known as *Eventail Jardinières* from the collection of the late Marquis of Londonderry. These ugly fan-shaped jardinières, with paintings by Doben that marred instead of enhanced the beauty of the delicate blue and white Sèvres, positively fetched the fabulous sum of £4,150. Indeed it was said that they had been bought in for that price by the family of the late Marquis, who had expected them to realize a still larger sum.

The *Journal officiel* informs us that there is carried on in Paris an industrial art of the existence of which most persons are ignorant. This art consists in the restoration of old books and manuscripts, and has been raised by a few experts to a marvellous perfection. These *artistes restaurateurs des livres* cure all the ills that books are heir to. They take out the most inveterate marks and stains; they stop up holes gnawed by rats or eaten by worms; they replace missing lines and leaves in such a way that no one can discover the interpolations; they re-make margins, giving them exactly the colour of the original; in fact, the *Journal* says that often the most learned bibliophiles cannot tell the "restored" copy from the perfect original work. Ornamental frontispiece, editors' marks, vignettes, coats of arms, manuscript or printed pages, all are imitated to a perfection that deceives even the most practised eye. Such restoration is of course expensive. At a sale of books some time ago a tattered, filthy, "almost repulsive" but also "almost unique" copy of the Breviary of Geneva only fetched 500 frs. on account of the horrid condition it was in. The purchaser at once took it to a book restorer, who demanded 500 frs., the sum for which it had been bought, to restore it to youth and beauty. The process he said would take a year.

Naples, so notorious in the seventeenth century for the vindictive jealousy of her artists, has just celebrated the second centenary of the death of Salvatore Rosa, all the artists in the city taking part in a solemn ceremony instituted in honour of the greatest of the Neapolitan masters in the Church of *Santa Maria degli Angeli*, where he lies buried. The difference of manners of the seventeenth and nineteenth centuries is illustrated by the fact that no one was stabbed or poisoned on this occasion.

New Publications.

- BECKMANN, E. *Étude sur la langue et la versification de Malherbe*. Elberfeld: Friderichs.
 COLEBROOKE, H. T. *Miscellaneous Essays: with Life of the Author by his son, Sir T. E. Colebrooke*. (3 vols.) Vol. 1. Trübner.
 GROTE, Mrs. *Personal Life of George Grote*. Murray.
 HARDENBERG, F. von. (Novalis.) *Eine Nachlese aus den Quellen des Familienarchivs*. Gotha: Perthes.
 KREMER, A. von. *Culturgegeschichtliche Streifzüge auf dem Gebiete des Islams*. Leipzig: Brockhaus.
 LÜBKE, W. *Württemberg u. die Renaissance*. (Festrede.) Stuttgart: Spemann.
 LYTTON, the late LORD. *Kenelm Chillingly*. A Novel. Blackwood.
 MANSELL, the late DEAN. *Letters, lectures, and reviews*. Ed. by Prof. Chandler. Murray.
 MARZIALS, T. *The Gallery of Pigeons, and other poems*. King.
 MORLEY, J. *Rousseau*. 2 vols. Chapman & Hall.
 RIO, A. F. *L'idéal antique et l'idéal chrétien*. Paris: Didot.
 THACKERAY, Miss. *Old Kensington*. Smith, Elder, & Co.

Theology.

Comparative History of the Egyptian and Mesopotamian Religions. (Vergelijkende Geschiedenis von de Egyptische en Mesopotamische Godsdiensten. Door C. P. Tiele.) Amsterdam: Van Kampen. 1872.

THIS is the first volume of what promises to be an excellent and useful work. Dr. Tiele has been, as is well known to those familiar with recent Dutch thought, a diligent student of the science of religion, and he here gives us the results of his researches in one section of the extensive field he cultivates. The work is distinguished throughout by analytic and graphic power, is well written, always clear and intelligible; often subtle and suggestive in thought, acute and incisive in criticism, though it now and then offends by far-fetched interpretations and arbitrary combinations. The mental atmosphere of Holland seems to be meanwhile in some respects propitious to such studies as those of Dr. Tiele. The sacred criticism, literary and historical, there cultivated is of the freest kind. The philosophy which the eloquence of Opzoomer has commended to Dutch theologians is peculiarly well adapted to the explanation of the psychological phenomena the historian of religion has to study. The public taste, too, seems to relish such studies, as a series of works on the principal religions, creditable alike to Dutch scholarship and enterprise, has been issued; while eminent specialists like Kuenen, Dozy, and Kern are well known outside Holland for their studies in the religions of Israel, Islam, and Buddha respectively. Though the work of Tiele cannot claim the merit of strictly original research, it yet exhibits everywhere a vigorous and disciplined mind working in the successive religious strata under the best guides.

The work when completed is intended to be a Comparative History of Ancient Religions. These are distinguished from the modern by the characteristic of nationality. All religions which are those of a people or race are ancient, even though they still survive; only those like Christianity or Buddhism, which aim at universality, are modern. The work, which is thus comprehensive enough in its scope, suffers somewhat from the mode of issue. This first volume is in three parts, which have appeared at different times. This has caused the author now and then to repeat himself, as in some of the preliminary discussions on race and mythology, and also allowed time for changes in what may be termed his underlying philosophy, leading, in one case at least—his explanation of the origin of Egyptian animal worship (cf. pp. 128, 807-8)—to a modification of view affecting the entire religion.

The Egyptian and Mesopotamian religions here dealt with have two things in common—they are theocratic and symbolical. By the one their mythologies, by the other their forms of worship, are determined. The influence of race, traditions, migrations, country, history—on religion are recognized, and each made to explain the growth and changes in the national faith and worship. The Egyptian and Mesopotamian races are possibly akin. The Mesopotamian is the so-called Semitic. The limits of this paper compel me to pass over the interesting histories of the religions of Egypt, Babel-Assur, and Phœnicia, and to confine myself to that of Israel.

Dr. Tiele's general conception of the religion of Israel is sufficiently indicated by the place he gives it in his *Comparative History*. It is simply an ancient religion which does not differ even upon its highest standpoint in nature and character from the religions of the surrounding and related peoples. The only distinction is in their very different developments. (Cf. pp. 526, 791.) But in this view he obviously forgets that evolution is creative, and a difference

in development soon amounts to a difference in species. Whatever the religion of Israel was at its origin, it became under the prophets specifically distinct from the other religions of the Mesopotamian stock.

Dr. Tiele's position agrees in the main with Kuenen's. There are, indeed, specific differences. The one brings to his task the habits of an accurate Biblical scholar, gifted with a rare faculty for minute criticism, subtle insight into textual and historical differences, and extraordinary powers of combining apparently unconnected incidents and allusions. The other has the tendencies and learning of a comparative theologian, alive to the similarities and coincidences in the several religions he studies, but more or less dependent for his knowledge of each on eminent specialists. And as the men differ so do their works. But under the differences lie the agreements which indicate Kuenen's as the influence that has chiefly determined Tiele's representation of the religion of Israel.

He holds that "the books of the Old Testament are the sources of a religion which arose first in the ninth century before our era;" that it was "never the religion of the people of Israel, but only that of a very developed section of the nation;" that "the so-called Jewish nation which formed itself after the Captivity is not the people of Israel, but the Mosaic Church, which attempted to realize her theocratic ideal." Hence the question is not—"How a people not more religious than its neighbours and kin can profess a religion so much purer than these, for as a people it has never done this: the question is, How from one of the religious services (Godsvereeringen) of Israel a higher religious view can have developed itself, and how the defenders of this view have managed to secure its supremacy and permanent acceptance with many." (pp. 527-8). In working out this thesis Dr. Tiele starts with the Hebrews in Goshen, who, he argues, were neither monotheists nor worshippers of Jahveh. Then he describes the original Jahvism, which, he affirms, was a Kenite religion introduced to Israel in the wilderness by Moses. He next traces in succession the breakdown of the Jahvism, adapted only to the rude tribes of the wilderness, in Canaan under the Judges; its revival under Gideon; the impetus it received under Samuel and the Prophetic Schools; its condition under David and Solomon, neither of whom were monotheists; its struggle for supremacy in Israel under Elijah and Elisha; the rise under Amos and Hosea of a new type of prophet and a more ideal doctrine; the temporary realization of the prophetic ideal under Josiah. When the Deuteronomic Law is composed Jahveh becomes Israel's one God, who may be served only by Levites and at no other place than Jerusalem. But the ideal is soon broken, idolatry returns, and with it comes the sombre prophet, Jeremiah (the sketch of whom, by the way, is the best thing Dr. Tiele has written), and the Captivity. Here the history rather abruptly ends with the intimation that "the Captivity, the formation of the priest-state under Ezra, and the emergence of Christianity belong to the development of the Jewish religion" (p. 775). It is all the more to be regretted that Dr. Tiele ends where he does, as his earlier studies peculiarly qualified him to trace the influence of Persian on Jewish religious thought, and the post-exile period not only offers many crucial points to his construction of Israelitish history, but is specially significant to a comparative theologian as marking the transition from an ancient to a modern religion.

There are many points in a work covering so much and such well-debated ground that invite criticism. Only one or two can be noticed. Dr. Tiele accepts Kuenen's hypothesis as to the relative ages of the Jahvistic and Elohist documents. He does so almost without discussion, unhappily, consider-

ing the state of the question and the religious as well as critical interests involved. But having accepted Kuenen's hypothesis—which has many things to commend it, and is meeting, though not in the precise form or with all the issues Kuenen binds up with it, with large acceptance from the younger scholars of Germany—Tiele does not seem to me any more than its author to seize its proper psychological meaning. If the Jahvistic is the earlier and prophetic, the Elohist the later and Levitical, document, brought down with the Levitical legislation as a whole to the post-exile period, then we have the ideal or spiritual side of the Israelitish religion developed before the sacerdotal. But this would involve higher and milder elements both in the primitive and later Jahvism than Tiele attributes to it. If the prophetic was prior to the priestly ideal, the spiritual an earlier as well as nobler and more extensive growth than the sacerdotal, then it is evident that the character of Jahveh must have been comparatively mild, not much in need of propitiation by sacrifice. And this may help to explain, too, the number and character of the Jahvistic Psalms, and to show how hymns with so little sacerdotalism in them could be written and sung in Israel. But it also shows that the want of any adequate notice of literary remains so religiously significant as the Psalms is peculiarly great in a history whose author holds the priority of the Jahvistic document.

Dr. Tiele's interpretation of the patriarchal traditions do not seem very satisfactory. He resolves them into nature-myths. Abraham is a heaven-god and his wife the queen of heaven. Their relation to Isaac is thus defined:—"The old heaven-god, the midnight heaven, and the moon-goddess are the parents of the laughing day-heaven, or sun-god, who is married to the fatness or fruitfulness of earth, Rebecca" (p. 434). Jacob-Israel is explained as a personification of the people, though originally a god of the year, by virtue, I suppose, of his twelve sons. But this is simply gratuitous conjecture, explains nothing, and does not in any way fit into the narratives. Indeed I regret exceedingly the manner in which Dr. Tiele has dealt with the traditions of the Mesopotamian race, especially when Israel is concerned. He has given here and there indications of what he could have done had not his conception of its later history stood in his way.

The only other point that need be here noticed is Dr. Tiele's theory as to the original Jahvism and its introduction into Israel. He holds that Jahveh was originally a nature-god with his abode in heaven, the god of thunder. And he supports his views by various Mesopotamian and Indo-European analogies by the symbols, the ark, and the kerubim used in the worship of Jahveh, and by the so-called feast of the Tabernacles, the oldest and for long only general feast of the Israelites, which fell in harvest, when the thunder-and-rain god was mightiest (pp. 545-551). But it seems strange that there should be no hint of this original character in the name of the god, Tiele's interpretation being accommodated not to the (supposed) etymology of the word, but to his own theory. His explanation, however, of the introduction of Jahvism into Israel is much more violent. He holds that Jahveh was originally neither an Israelitish, nor Egyptian, nor Canaanite, but a Kenite god, adopted by the Israelites in the wilderness through the influence of Moses. Now this is not only conjectural, but improbable in the highest degree. Of the Kenites we know little, not enough certainly to warrant what is here said of them. Then the Israelites had already strong religious convictions. Dr. Tiele attributes the Exodus to a religious cause (p. 536). Now it does seem illogical to make the nation which left Goshen rather than allow its worship to be reformed and the Egyptian ritual established in its place, accept so soon after,

without any struggle, an entirely new and stern religion. This is the more extraordinary as he repeatedly argues from religious names and traditions that Israel belongs to the Mesopotamian race, and affirms that the name of "the god of spirit and life in Babylon, Hu, Ao, Hea, or Iva is without doubt related to that of Jahveh" (p. 548). Certainly on this ground the inference lay near enough that Israel as a branch of the Mesopotamian stock did not need to borrow, because it had brought from its primitive home the name of its god.

Though thus differing on these and other points from Dr. Tiele, I have found his work interesting and suggestive. In the other sections of his work there is much less ground for difference, and more for commendation. The work in which he is engaged is one of peculiar value to the science of religion. It is with pleasure that I notice his transference from a pastoral charge at Rotterdam to the Remonstrant Seminary at Leyden. He is while superintending that seminary to lecture to the students of the university on the subject he has made so thoroughly his own. His inaugural lecture delivered in the great hall of the university has just come to hand. It is an eloquent argument in vindication of the right of the religion of savage races to be counted the starting-point of religious history. If the place where it was delivered was significant as to the changed relations of old theological enemies, the lecture itself is as significant as to the freedom and fearlessness of religious thought in Holland.

A. M. FAIRBAIRN.

Life and Letters of St. Francis Xavier. Rev. H. R. Coleridge, S.J. Vol. ii. Burns, Oates & Co.

THE second volume of Father Coleridge's work is hardly equal in interest to the first. The letters are so much the most authentic documents which we have that it was natural to give them with scarcely an exception at full, and this involved curtailing everything else, and even omitting some things, like Joam Fernandez' letters on the objections of the Bonzes of Japan, which might have had even a higher interest. The letters themselves are certainly characteristic, but it is inevitable that they should be full of repetitions; the same directions to India, the same requests to Europe occur again and again: and there are letters in which the same doubtful signs of promise are repeated without qualification, for in most of his own letters to Europe the saint observed the rule he recommended to his disciples, and confined himself to what could be published as edifying.

One can trace a certain change in the writer's point of view in this volume compared with the first. For instance, the directions to Mancias turn principally upon fervour; the directions to his later colleagues turn upon humility and tact. These last, in a good sense, are decidedly Jesuitical; perhaps he would hardly have allowed one of his subjects to copy his example, and to try to reward a lady for her attachment to the Society by marrying her daughter somewhat above her station. In the letters to Europe, where he had begun by demanding simply men of approved self-devotion, no matter how uncultivated, to baptize and catechize, we find him first demanding preachers for the different Portuguese stations, then dialecticians from Belgium and Germany to face the climate and convert the universities of Japan, and insisting more and more on the need of interior perfection in the missionaries to be sent, and hinting more and more plainly at the difficulty of maintaining the spirit of the Society under such a total change of conditions; at least this is how it is natural to interpret the reiterated requests that Ignatius will send some one intimate with himself and penetrated with his spirit, even though he should have no

other special qualification, to take up the reins of government at Goa.

Perhaps of the other points in the book the two following are the most noticeable. St. Francis was evidently struck by the great poverty of Japan and by its anarchy, where recent travellers are struck by its elegance and order. His twelve years' experience in the East had not the slightest tendency to incline him to give up hopes of doing what the great mediæval missionaries had done, and converting whole nations from above, and fall back upon the primitive system of converting populations from below.

G. A. SIMCOX.

THE EPISTLE TO DIOGNETUS.

To the Editor of the ACADEMY.

SIR,—In my notice of Overbeck in the *Academy* of January 15 (vol. iv., pp. 27, seq.), I may have seemed to imply in too unqualified a manner that Dr. Overbeck was alone in maintaining the late origin of the Epistle to Diognetus. It is but just, however, to our native scholarship to say that while Overbeck has elaborated the subject with greater fulness, he has been anticipated on the main point, as well as in several of his arguments, by Dr. J. Donaldson in his *History of Christian Literature and Doctrine*, vol. ii., pp. 126-142. Dr. Donaldson, indeed, even goes so far as to hint a suspicion that the Epistle may be the forgery of Henry Stephens himself.

Edinburgh, Feb. 3, 1873.

ROBERT B. DRUMMOND.

Intelligence.

The works of S. Isaac, of Antioch, one of the most eminent Syriac theologians after S. Ephraim, are in course of publication by Prof. Bickell, a distinguished "convertite" and Semitic scholar. The first part is reviewed by Prof. Nöldeke in the *Centralblatt* for February 22nd. S. Isaac appears as a strict censor not only of heresy, but of morals. Their rapid conversion to Christianity failed to extinguish the attachment of the Syrians to the ceremonies of their ancient cults. Thus the Christian women of Antioch are described as sacrificing in secret on the housetops to Venus (Kaukabthâ, "the star"). A most unflattering picture is given of the life of the Oriental monks and clerics.

M. Douen has published some researches on the conduct of Fénelon during the persecutions of the Huguenots, which deal a severe blow to that eminent prelate's reputation for tolerance and humanity. See *L'intolérance de Fénelon. Études historiques d'après des documents pour la plupart inédits* par O. Douen, Paris, 1872.

A French translation of Prof. Nöldeke's popular essay on *The Old Testament Literature*, (see *Academy*, vol. i., p. 69) is about to be published by MM. Derenbourg and Soury.

In the fourth of a series of letters in the *Guardian* on "Manuscript Evangelia in Foreign Libraries," Mr. Burgon calls attention to a fragment of an old Latin version of St. John's Gospel, published under the title *Un Antiquissimo Codice Biblico Latino Purpureo conservato nella Chiesa di Sarezzano, del Sacerdote Guerrino Anelli*. (Milano. 1872.) It is said to be of the sixth or seventh century, and is inscribed in silver uncials on purple vellum. Mr. Burgon states that it is a fragment of a hitherto unknown recension of the old Latin.

The Rev. T. K. Cheyne, Fellow of Balliol College, Oxford, has in preparation a commentary on the Book of Genesis, somewhat in the style of Tuch's well-known work, but with a more distinct reference to the comparative study of myths and legends, and the elimination of their religious and historical elements.

The Bishop of Natal has another book in the press, a volume of popular "Lectures on the Pentateuch and the Moabite Stone," with appendices containing: 1. The Elohist Narrative; 2. The Original Story of the Exodus; 3. The Pre-Christian Cross.

Dr. H. Grätz has published a valuable dissertation on *The unity of the prophecy of Joel and the artistic division of its parts* (Breslau: Skutsch). He takes the imperatives in i. 13, 14, ii. 1, 15-17, to be rhetorical; the locusts to be actual, not metaphorical; and the prophecy itself to begin at ii. 19, the preceding portion of the book being merely episodic, as is frequently the case elsewhere in the Bible, e.g. in Jer. xiv., xv. The book was therefore written at one time: it falls into two parts, the former of which is the prelude to the latter. Joel first speaks ironically on the merely formal manner in which the fast-day or fast-days had been kept, and then describes in vivid colours the calamities which had occasioned them, which prefigured the still greater future calamities gathered up under the name of "the day of the Lord."

Contents of the Journals.

Theologisch Tijdschrift. March.—Strauss' *The Old and the New Belief*; rev. by Rauwenhoff, part ii. [Misses the scientific tone, and questions the validity of the arguments. The success of the work another symptom of the decay of idealism.]—Contributions to the criticism of the Synoptic Gospels, part vi.; by A. D. Loman. [The artificial arrangement and purposeful character of the parables in Matthew, especially in Matt. xiii. A colossal specimen of ingenuity.]—The supercriptions of the Gospels; by J. T. Bergman. Two works on the Fourth Gospel; rev. by A. D. Loman. [A notice of Mr. Sanday's recent essay (objecting strongly to his "psychological" method), and Dr. Vigeli's Inquiry as to the writer of John xxi.]—Literary summary. [Volck on Deut. xxxiii., Chwolson's *The Semitic Peoples*, Govet's *Études Bibliques*, &c.]—Emendation of the text of Origen in Matt., xv., p. 671; by Loman. [Read *εἰτε ἀπὸ μοχθηρίας τῆς διαρθρώσεως τῶν γραφόμενων, εἰτε καὶ ἀπὸ τῶν λατρῶν τῶν τὰ ἐαυτοῖς δοκοῦντα.*]

Philosophy and Physical Science.

The Principles of Psychology. By Herbert Spencer. (2nd Edition.) 2 vols. Williams and Norgate.

ALTHOUGH psychology occupies the place of a special science in the system of knowledge which Mr. Spencer is engaged in developing, yet his exposition of its principles has necessarily involved a re-arguing of certain fundamental philosophical questions which have been previously discussed in his "First Principles." Indeed such argument seems to constitute the most important part of the new matter that has been added in this second edition of the work before us. For though the study of the human mind is not in itself philosophy, as certain Englishmen and Scotchmen seem to imagine, it is at least a sort of vestibule to philosophy, from which one passes directly to the *locus principiorum*. It is impossible to treat of mind (however phenomenalist be the manner of the treatment) without defining the relation of mental to material phenomena, or we may say of mind to matter, in so far at least as they are objects of thought. *Prima facie*, this relation is twofold: matter is both cause and object of mind. Thinking is a function of the brain, whatever else it may be, and what we think about is chiefly the external world. But the complete determination of this relation in its two aspects is the central problem, not perhaps of all philosophy, but of modern European philosophy since Descartes. I do not mean that this is what philosophers have been most deeply concerned to discover; that must be stated more generally as the relation of the thinker to the universe; but they have expected to find by the solution of the former question the data for answering the latter. And the success of Mr. Spencer's exposition, considered as systematic, must be held to depend on his success in answering this question; for his treatise, however valuable and interesting be the varied discussion that it contains, is certainly not an exposition of psychology, as the subject is commonly understood—what Mr. Spencer calls subjective psychology. It consists of eight books, of which the first contains chiefly human physiology, the third chiefly comparative physiology or biology (treated from an original and interesting point of view), the fifth a mixture of hypothetical physics with that hypothetical-deductive biology which is now common among disciples of Darwin; the sixth is to a great extent logical, the seventh avowedly metaphysical, while the eighth forms a transition to the sociology which is to follow. The subjective psychology is therefore given us in a somewhat fragmentary state. This is perhaps partly due to the manner in which the book has been composed. To half re-write a work written fifteen years ago is a difficult task, and I scarcely think that Mr. Spencer has been quite successful in performing it. He has transposed the two halves of the original treatise, in which Analysis preceded Synthesis; and

this is no doubt the most natural order of treating the subject as a sequel to the previously issued *Principles of Biology*. But the result involves two disadvantages: (1) the results of Analysis (of perception of space and primary qualities of matter in particular) are to some extent assumed in the Synthesis; and (2) Mr. Spencer has been obliged to prefix to the Synthesis (in Part ii.) an account of the elements and laws of mind which is not completely intelligible without the Analysis, and which after all does not cohere very well with the other parts that follow, as (e.g.) the view of the laws of association given in Part ii. is not traceable in Part iv.

However, it is difficult to criticize the arrangement of the work without some pre-judgment of the points discussed in it. For in fact the very definition of psychology and determination of its relation to other sciences (and this latter is a point which Mr. Spencer is especially concerned to settle) cannot be given without in some way deciding what has been called the central problem of philosophy. Before we can study mind we must settle what mind is: yet we ought not to settle it without giving some reasons for our decision: and yet every writer of originality feels that he cannot adequately give such reasons till after a careful exposition of his peculiar doctrines. All, therefore, that we can expect is that a writer's definition of his subject shall be clear and distinct in itself, and shall be found to cohere with his conclusions when we have been led up to these.

But, tried by this standard, Mr. Spencer's work scarcely seems satisfactory. His view of the subject appears to have a fundamental incoherence, which shows itself in various ways on the surface of his exposition, but of which the root lies much deeper, in his inability to harmonize different lines of thought: though each of these is separately pursued by his patient, powerful, and comprehensive intellect not only to results always interesting and suggestive, but often with remarkable closeness and precision of method. This incoherence I must attempt to exhibit, as far as is possible. Let us begin by asking what Mr. Spencer means by psychology. In his first chapter (§ 7) he contrasts the "psychological" with the "physiological" point of view, and afterwards uses several times the cognate antithesis of "psychical" and "physical." At first sight this pair of terms seems intended to express what Hamilton calls natural dualism, that view of the relation of mind and matter which the post-cartesian philosophy has been continually trying to transcend, but which the progress of physical science since Descartes has only rendered sharper and more definite. Thus in § 18 we are told that "without questioning the truth of the assumed correlation between the changes which *physically considered* are disturbances of nerves, and those which *psychically considered* are feelings, it may be safely affirmed that physiology, which is an interpretation of the *physical* processes that go on in organisms in terms known to physical science, ceases to be physiology when it imports into its interpretations a *psychical* factor . . . here we are treating of nerve-actions on their physiological side, and must ignore their psychological side." From this passage we should infer that psychology treated of feelings, and physiology of nerve processes; and a similar inference is suggested by other passages, as (e.g.) § 76, "the psychical relation between two feelings answers to the physical relation between two disturbed portions of grey matter." At the same time, between the two passages quoted (in § 53) he has used psychology in a wider sense, so that only one division of it—subjective psychology—has for its subject-matter the states and relations called "psychical" in the above-quoted passages. Though § 18, &c., would have led us to infer that this was psychology proper, in § 53 it is not even presented as the most impor-

tant part of the study, but as secondary to objective psychology.

What then is objective psychology? We should naturally guess it to be the physiology of the nervous system (what in § 57 is called neuro-physiology)—the study which deals with those "physical changes" which he regards as correlative to "psychical changes." And this would be confirmed by the fact that Part i., entitled "The Data of Psychology," is chiefly and for the first five chapters entirely occupied with the structure and functions of the nervous system; and by the opposition (in § 37 and elsewhere) of "objective changes or nervous actions" to "subjective changes or feelings."

But in truth one of the most original and suggestive of the new points of view which we owe to Mr. Spencer is the distinction between objective psychology and physiology. Objective psychology as he defines it does not deal with nervous actions or changes in the organism as such, but with the connexion between the relations of these and relations among the phenomena of the environment. Indeed in § 53 he seems to give this as the definition of psychology generally, and thus to present quite a different antithesis between psychology and physiology from that which the corresponding adjectives have been used to express. Thus "subjective psychology" would not be the study of "feelings or mental states considered in themselves, but in their relation to the environment." But in § 57 he describes Part ii., as occupied with "the natures of particular modes of consciousness, as ascertained by introspection" without any reference to the environment: which is also ignored through the greater portion of Part ii.

My conclusion on the whole is that the subject divides itself for Mr. Spencer into three portions: (1) physiology supplying those facts respecting the nervous system which form the "data of (? objective) psychology;" (2) objective psychology which surveys the relation of the organism and its changes to changes in the environment, and "the totally independent science of subjective psychology, treating of feeling or consciousness." But if so, his terminology should have been made to correspond throughout with this view.

So far, though the antithesis of "psychical" and "physical" seems involved in some confusion, that of "subjective" and "objective" has remained clear. "Feeling and nervous action" are "the subjective and objective faces of the same thing," although it is not objective psychology but physiology that investigates these "objective faces" considered in themselves. But soon this second antithesis gets confused in its turn. In § 53 "subject" seems to be used as an equivalent term for "organism;" and again, in § 81, feelings are spoken of as having a "subjective origin," when the meaning is that they are originated within the organism. In fact we may say generally that when Mr. Spencer is considering the relation between the organism and the environment he uses "subjective" as equivalent to "internal;" but when he is considering the relation between feeling and nervous action he restricts "subjective" to the former.

But our perplexities are only just beginning. In Part i., as I have said, the view of natural dualism is sharply and clearly given. Although thoughts and feelings are so inseparable from nervous action that we may fairly speak of the two as "subjective and objective faces of the same thing," yet Mr. Spencer says "we remain utterly incapable of seeing, and even of imagining, how the two are related;" and so mind still continues to us something without a kinship with other things, and subjective psychology a totally unique science."

It is to be observed that a certain carelessness of terminology is involved in speaking of mind as the subjective counterpart of nerve-action, as on Mr. Spencer's view this is only one aspect of mind. Objective psychology is, as we

have seen, the study of mind in another aspect, and accordingly we find in cxi. of Part iv. that "intelligence consists in the establishment of correspondences between relations in the organism and relations in the environment." We need, therefore, a word less ambiguous than mind to express that which subjective psychology specially contemplates. A word commonly used is "consciousness," and this Mr. Spencer employs in § 56 in the restricted sense, which we want. "Thoughts and feelings constitute a consciousness . . . until it acknowledges its indebtedness to subjective psychology objective psychology cannot legitimately use any terms that imply consciousness."

But in Part iv., § 179-80, Mr. Spencer speaks as if—so far from our being "utterly incapable of seeing" how consciousness and nervous action are related—we could see how the former naturally arises at a particular stage of development of the latter. Here the prominent distinction between psychical changes or consciousness and physical changes would seem to be that the former make a successive unbroken series. We are told that the "differentiation of psychical from physical changes" is slight in creatures like starfish and centipedes; until the seriality of the changes is complete they are to be regarded as only "incipiently psychical." But as soon as there results an "unbroken series of changes *there must arise a consciousness.*" I can scarcely conceive that when this was first written (in 1855) Mr. Spencer would also have written the passages quoted from Part i.

But if in developing his objective psychology Mr. Spencer shows a tendency to move from the dualistic view of Part i. towards materialism, his subjective psychology is open to a complaint of exactly the opposite kind. I have before noticed the twofold relation in which, in the view of Natural Dualism, matter stands to mind. A peculiar portion of it, nerve-matter, is so related to mind that changes in it always accompany mental states; but again, matter generally is the object of mental processes—perception and thought. We have been so far occupied with the first relation. But the least reflection will show that this involves the second. For when, after thinking of material phenomena as facts inseparably connected and yet totally without kinship with mental phenomena, we turn to give an account of these latter, it is obvious that we must include among them those very thoughts of material phenomena which we have just been thinking—representative cognitions of matter; and as all are agreed that these are derived from perceptions or presentative cognitions, we must include also these latter. But in Part ii. c. 2 on the "Composition of Mind" no mention is made of cognitions of matter. We are told that "The proximate components of mind are feelings and the relations among feelings;" these latter being afterwards explained to be transitions from one feeling to another. The term feeling is no doubt a very general one, and might be used to include cognitions of matter. But not only does Mr. Spencer subdivide the class of feelings into emotions and sensations, making no mention of such cognitions, but afterwards when he comes to speak of perception (e.g. iv., cviii., § 211) he analyses it into sensations and relations among sensations. "Every perception must be made up of combined sensations, and must so be in one respect sensational . . . sensations are primary undecomposable states of consciousness, while perceptions are secondary decomposable states, consisting of changes from one primary state to another," or more exactly "when consciousness is almost wholly occupied with changes—with the relations among sensations—and sensations are present so far only as is needful for the establishment of relations among them, we have the condition of consciousness called perception."

And when in § 480 he gives the completer classification

of mental phenomena, which should perhaps have been given in Part ii., we find that in all the four sub-classes of the class of cognitions, (1) presentative, (2) presentative-representative, (3) representative, (4) re-representative, consciousness is occupied with relations among sensations and faint copies of sensations.

And further, though in Part ii. feelings are said to "occupy space" and to be "related to other feelings in space," so that cognitions of extension (though not of matter) are incidentally recognised: in Part vi. we find the cognition of extension, or space-intervals between feelings, hypothetically analysed into cognition of possible time-intervals, "a relation between co-existent positions represents a relation between successive positions;" and therefore the ultimate analysis of consciousness seems to leave us only feelings and relations of (1) likeness and unlikeness, and (2) order in time—actual or hypothetical—among feelings.

We come then to this rather singular result: on the one hand material processes are described as facts, "totally without kinship with feelings," and on the other hand the cognitions of these material processes are analysed into feelings and transitions between feelings—which are themselves, as Mr. Spencer takes care to point out, momentary feelings. Though in Part ii. the reader's faculty of representing matter in motion is strained to the utmost to conceive the molecular processes in nerve-centres and nerve-fibres which are supposed to accompany feelings and relations, these representations are not there recognised among the mental phenomena upon which he is asked directly to reflect. But incidentally he is told that the "conception of an oscillating molecule is built out of many units of feeling," and the analysis of the latter half of Part vi. shows how it is so built. Thus, though matter when viewed as cause or inseparable concomitant of mind seems totally without kinship with it, matter viewed as object of mind seems to resolve itself into purely mental elements. The dualism so explicitly maintained on the one side seems evanescent on the other; and we seem landed in the pure subjectivism, or what may be called constructive Humanism, of Professor Bain.

But this conclusion Mr. Spencer repudiates in the strongest way: as e.g. in § 88, at the conclusion of the chapter on "The Relativity of Feelings," he tells us that, although "our states of consciousness are the only things we can know," we cannot prove this without "tacitly or avowedly postulating an unknown something beyond consciousness." Now in saying this he seems to me to misapprehend the nature of the postulate to which he refers; and the misapprehension is of fundamental importance. In the chapter which § 88 concludes (Part ii. c. 3) he has given an elaborate proof of the proposition that, "though internal feeling habitually depends upon external agents, yet there is no likeness between them either in kind or degree." The feeling, he argues, is an effect which varies quantitatively and qualitatively according to the specific structure of the organism, its individual structure, the part affected, the condition and motion of that part, &c., while the cause remains the same. All this is most important to notice, and no one has ever put it better than Mr. Spencer. But in conceiving these organisms and the matter acting on them we are conceiving systems of material particles, extended, solid, heavy, of definite size and shape, definite mutual relations, continually changing in a definite manner; and further our conviction of the cogency of Mr. Spencer's arguments depends on the assumption that the representations of matter in motion involved in our apprehension of these arguments are *true* representations, or sufficiently near the truth; and that cognition of truth should not be the same in all consciousnesses is strictly inconceivable. It

is then not an "unknown something," but a very definitely known something that Mr. Spencer has been postulating; viz.: matter extended in three dimensions, solid, subject to mechanical laws, moving, vibrating, &c. If now these definite conceptions of something other than consciousness (though its object) are invalid, the argument that has used them must be invalid too. No process of inference can at once destroy its own assumptions and establish some further conclusion.

But to return: for I am examining the consistency of Mr. Spencer's conclusions rather than his arguments. Suppose the postulate to be that an unknown something beyond consciousness exists: we may at least expect that the state of consciousness in which we think of this unknown something (in so far as we can be said to think of it) shall be carefully examined and compared with other elements of consciousness. For we observe that when a metaphysician (if I may apply the invidious term to Mr. Spencer) announces that some object of thought is "unknown," it is not quite certain what he means by it. E.g. in the first chapter of Part ii. Mr. Spencer argues that the substance of mind is unknown, at the same time holding that we cannot but think in mind something that "persists in spite of all changes and maintains the unity of the aggregate in spite of all efforts to divide it." Other thinkers again (e.g. Cousin and Mansel) declare that mind is directly known to us as substance. But when asked what they know about it (apart from its varying phenomena), they can only predicate persistence and unity, so that their knowledge comes to much the same as Mr. Spencer's ignorance.

What then is our exact nescience of this "something beyond consciousness?" Here again Mr. Spencer's different utterances are hard to reconcile. Sometimes he seems quite in earnest with its "unknownness," e.g. in § 448, he speaks of this "consciousness of something which is yet out of consciousness" as "indefinable," and contrasts it with "the vivid and definite states of consciousness known as sensations." On the other hand in an interesting discussion of the scope of logic, introduced for the first time in this edition (§ 302-305), he tells us that "logic . . . contemplates in its propositions certain connexions predicated, which are necessarily involved with certain other connexions given: *regarding all these connexions as existing in the non-ego*—not, it may be, under the form in which we know them, but in some form." But in § 473, where Mr. Spencer illustrates by a diagram his "Transfigured Realism," the view seems to be this: although we cannot say that the real non-ego resembles our notion of it in "its elements, relations, or laws," we can say that "a change in the objective reality causes in the subjective state a change exactly answering to it—so answering as to *constitute a cognition of it*." Here the "something beyond consciousness" is no longer said to be unknown, as its effect in consciousness "constitutes a cognition of it." We know more about it than merely that it exists, though only this, that the changes in our consciousness exactly answer to the changes in it. But there is yet another view which some passages suggest: viz., that the non-ego, however unknown in other respects, is rightly thought as "Force." It is not merely that he speaks (as in § 63) of "outlying activities" and "external forces," for it might be said that by "activity" and "force" is merely meant the cause of change, so that this view might coincide with the previous one. But in the chapters in which Mr. Spencer describes what he calls the "differentiation of subject and object," he explains how I come to be conscious of a force without me "somehow allied to that which I distinguish as force" in myself, and how "the root-conception of existence beyond consciousness becomes that of resistance plus some

force which the resistance *measures*." If this conception be legitimate and valid, as I understand him to argue, the "unknownness" of the non-ego is still further reduced.

But whether the "something out of consciousness" be (1) really unknown and only reached in an "indefinable" consciousness, or (2) knowable in respect of the connexions of its parts, or (3) known in so far as the changes in it "exactly answer" to changes in consciousness, or (4) rightly thought as force, akin to and measurable by our own sensations of muscular effort, it seems at any rate clear that it is not extended and solid, not the material world believed in by ordinary men. And when in the physical parts of his treatise (as in the development of objective psychology generally) Mr. Spencer seems to have in view the material world of Common Sense, we easily suppose him to regard it *quâ* solid, extended, &c., as merely "phenomenal."

It only remains to ask how he justifies this view as against common sense. We look for this justification in Part vii., where he undertakes to show the "congruity with other dicta of consciousness" of that view of subject and object which he has assumed throughout.

But—and here is the last surprise that I have in store for the reader, which will, I fear, reduce him to a state of hopeless bewilderment—Mr. Spencer's very original argument, which is conducted through eight chapters with much earnestness and intensity of conviction, is not *against* but *for* Common Sense! We have naturally associated this Absolute of his, which is the cause of our sensations and perceptions but inexorably refuses to resemble any of them, this "mysterious" something out of consciousness, just reached in an "indefinable" consciousness with the "Ding an Sich" of Kant, or the Noumena that play hide and seek with us in several chapters of Mr. Mill's Logic; when suddenly Mr. Spencer turns round and fires his argument full in the face of Kant, Mill, and "metaphysicians" generally. He tells us that "metaphysicians" illegitimately assume that "beliefs reached through complex intellectual processes" are more valid than "beliefs reached through simple intellectual processes;" that the common language they use refuses to express their hypotheses, and thus their reasoning inevitably implies the common notions which they repudiate; that the belief of Realism has the advantage of "priority," "simplicity," "distinctness." But surely this prior, simple, distinctly affirmed belief is that of what Mr. Spencer terms "crude Realism," the belief that the non-ego is *per se* extended, solid, even coloured, (if not resonant and odorous). This is what common language implies; and the argument by which Mr. Spencer proves the relativity of feelings and relations, still more the subtle and complicated analysis by which he resolves our notion of extension into an aggregate of feelings and transitions of feeling, lead us away from our original simple belief—that (*e.g.*) the green grass we see exists out of consciousness as we see it—just as much as the reasonings of Idealism, Scepticism, or Kantism. He says himself that "the *primitive* belief" that redness exists as such out of the mind "is thus rendered as hard for the psychologist to entertain as *its opposite* is hard to entertain for the uncultivated." But when "the psychologist" (whom I suppose we must carefully distinguish from the metaphysician) has got rid of this "primitive belief," what becomes of the "argument from priority?" when he has further shown that our apprehensions of space are relative and indeed has elaborately analysed order in space into hypothetical order in time symbolized by co-existent feelings—what becomes of the "argument from simplicity?" and when the object is left an "indefinable" something, to whose nature we perhaps vaguely attain by represented feelings of muscular tension, what becomes of the "argument from distinctness?"

Really the long discussion in Part vii., in which Mr. Spencer first seems to be maintaining Natural Realism and then proceeds to denaturalize it, has all the serious incongruity of an intense metaphysical dream.

Here I must conclude. Whatever may be the case with the ego and the non-ego, Mr. Spencer's opinions about them seem to me certainly "unknowable." None the less must it be said that the execution of separate portions of the work is often admirable. Of the new matter we may especially select for praise the physiological exposition in Part i. and the discussion of the social sentiments in Part viii. But, throughout, the great range of exact knowledge possessed by Mr. Spencer, the originality of his treatment and leading generalizations, the sustained vigour of his scientific imagination, the patient precise ingenuity with which he develops definite hypotheses where other thinkers offer loose suggestions, are no less remarkable than the mazy inconsistency of his metaphysical results.

H. SIDGWICK.

Notes on Scientific Work.

Botany.

The Embryo of Grasses.—Few points in vegetable morphology have been more debated than the interpretation of the gramineous embryo. The plumule enclosed in a sheath (pileola) lies upon a large cushion-like body (the scutellum or hypoblast), and on the opposite side of the plumule is an additional minute body (the lobule or epiblast). Without enumerating all the views that have been held with regard to these three structures it is sufficient to mention that the older botanists agreed with Mirbel in regarding the scutellum as a cotyledon, while, more recently, the view of Richard has been generally adopted, according to which the pileola is the cotyledon, and the scutellum and lobule stem structures. This view has been ably supported by Clarke (*Trans. Linn. Soc.*, vol. xxii.), and the strong argument in favour of it was the impossibility of regarding both pileola and scutellum as foliar organs, inasmuch as they would in that case represent two superimposed leaves upon the same side of the axis. Van Tieghem suggests (*Ann. d. Sc. Nat.*, 1872, pp. 236-276) that the pileola is stipular, which prepares the way for accepting the cotyledonary theory of the nature of the scutellum. This would make the cotyledon play the same part as in palms and *Liliaceæ* of an organ for absorbing the nutriment stored up in the albumen. Hanstein (see *Academy*, Sept. 1st, 1872, p. 328) fully supports the revived and no doubt correct theory of Mirbel. It may be remarked that, standing alone, Van Tieghem's argument that the vascular tissue of the scutellum ought to form a loop if it is not a foliar organ is not very weighty. What view is to be taken *now* of the embryo of *Zostera*?

Reproduction of Lycopodium.—J. Fankhauser (*Bot. Zeitung*, 1873, pp. 1-6) has supplied what has long been a great desideratum in the life history of the higher cryptogams. *Selaginella* alone, amongst the *Lycopodiaceæ*, possesses two kinds of spores, one of which ultimately produces the embryo, with the intervention of a prothallial stage. The details of the reproduction of this genus have been completely worked out by De Bary and Pfeffer. *Lycopodium*, however, has spores of only one kind, and no one has hitherto succeeded in tracing the further development of these. Fankhauser has lately found attached underground to young plants of *L. annotinum* a curiously grooved and lobulated body, which proves to be a prothallus bearing, like that of *Ophioglossum*, both archegonia and antheridia. This important discovery would seem, therefore, to entail the removal of the isosporous *Lycopodiaceæ* to the neighbourhood of Ferns. It is comprehensible that *Lycopodium* might merely have a homoplastic agreement with *Selaginella*. What, however, are we to say in the case of the carboniferous *Lycopodiaceæ*, of which *Lepidostrobus* and *Flemingites* agree with *Lycopodium* in only having had spores of one kind, while *Triplosporites*, like *Selaginella*, had two kinds?

Distribution of the Cupulifera.—An elaborate memoir by CErsted (*Vidensk. Selsk. skr.*, 1871) is devoted to a preliminary study of existing *Cupulifera*, principally with reference to their relations to fossil species. These were to have been discussed in the concluding portion, but of this the death of the author has unfortunately deprived us. His classification differs somewhat from that adopted by De Candolle in the *Prodromus*. Three suborders, *Fagineæ*, *Quercineæ*, *Castanineæ* are established; the last, having the styles stigmatic only at the apex, is distinguished by this character from the first two, in which the styles are stigmatic on their inner surface. *Fagineæ* comprises *Fagus* and *Nothofagus*, a genus constituted for the beeches of the southern hemisphere.

Quercinea consists, besides *Quercus*, as limited by Cæsted, of *Cyclobalanopsis*, a small group of oaks with the habit of chestnuts from S.E. Asia. *Castanina* is formed of *Castanea* and two new genera, *Pasania* and *Cyclobalanulus*, formed of species which De Candolle reckoned amongst oaks. Each of these suborders has had its own centre of distribution: the chestnuts in the Malayan Archipelago, the oaks in Mexico. At the present epoch, however, the beeches are widely scattered, and their centre of distribution must be looked for in the past. *Fagus sylvatica* is European, *F. ferruginea* belongs to N. America, and *F. Sieboldii* is limited to Japan; the species of *Nothofagus* inhabit South Chili, New Zealand, Terra del Fuego, and Tasmanic. Cæsted thinks that Japan supplied the connecting link between the northern and southern areas—*F. Sieboldii* being the only species in the north with the characteristic nervation of the south. The existing flora of Japan as well as that of New Zealand, Tasmania, and Chili is miocene in character; and beeches existed at any rate in the pliocene, since *F. sylvatica* has been found in deposits of that age in the valley of the Arno. Although Cæsted seems to have held that the three divisions of the *Cupulifera* originally diverged from a common stock, he appears also to have regarded the present world distribution of the family as implying that the species spread from three equatorial centres as they augmented in number. Transitional forms arose from the blending of the expanding areas belonging to each group; out this seems a somewhat violent supposition. *Cyclobalanulus* is the form of *Castanina* most remote from oaks and beeches; of the other genera of the Indo-Himalayan region *Castanea* approaches the beeches, *Pasania* the oaks; *Cyclobalanopsis* in the same region approaches chestnuts. It is hardly possible to understand how these genera could have arisen by anything like natural hybridism. Nor does Cæsted favour the view which has been maintained by Grisebach, that identical climatic conditions are correlated with similarity of organization, inasmuch as he remarks its inability to explain the existence of the *Ilex* section of oaks under the same latitude all round the world, although under very different climates. The only reasonable explanation of intermediate generic forms is that they represent a more generalized type, belonging to a stage in the genetic series antecedent to the appearance of those they connect.

Production of Alkaloids in Cinchona.—Howard states (*Pharm. Journ.*, Jan. 11, 1873) that 20 lbs. of the dried leaves of *Cinchona succirubra* yielded on analysis only a minute quantity of cinchonidine, which he is inclined to attribute to the accidental presence of a minute fragment of bark. This appears to prove that the leaves play no direct part in the formation of the alkaloids. Plants form their albuminoids probably in the stem-tissues from the starch, or substances derived from starch, supplied by the leaves and the ammoniacal salts taken up by the roots. The alkaloids of cinchonas are no doubt formed from the same materials, and the results obtained by Broughton (see *Academy*, February 1st, 1873, p. 49), in which increased manuring with ammoniacal compounds produced an additional amount of alkaloids, would seem to indicate that the formation of alkaloids was a means by which the plants got rid of superfluous nitrogen. This is confirmed by the consideration that the alkaloids are stored up in tissues, which being continuously renewed internally and desquamated externally are only temporarily a part of the plant's economy.

The Secretory Canals of Plants.—In a lengthy paper on this subject in the *Annal. des Sciences Nat. (Botanique)* for November, 1872, Van Tieghem draws the following conclusions:—Coniferæ, he states, never possess canals in the primary cortical parenchyma of the root; but this is the only region from which secretory organs are entirely absent in this order. All the other tissues of the plant may contain them, and in this respect six principal modifications may be distinguished, as follows:—1. No canals in the root nor stem; *Taxus*. 2. No canals in the root; canals in the cortical parenchyma of the stem; *Cryptomeria*, *Taxodium*, *Podocarpus*, *Dacrydium*, *Torreya*, *Tsuga*, *Cunninghamia*. 3. No canals in the root; canals in the cortical parenchyma and in the pith of the stem; *Ginkgo*. 4. A secretory canal in the root; canals in the cortical parenchyma of the stem; *Cedrus*, *Abies*, *Pseudolarix*. 5. Canals in the wood of the fibro-vascular bundles of the root and of the stem; canals in the cortical parenchyma of the stem; *Pinus*, *Larix*, *Picea*, *Pseudotsuga*. 6. Canals in the liber of the fibro-vascular bundles of the root and of the stem. Canals in the cortical parenchyma of the stem; *Araucaria*, *Widdingtonia*, *Thuja*, *Cupressus*, *Biota*. In Cycadææ the canals are found disseminated through the cortical parenchyma of the stem; the pith of *Cycas* appears destitute of them. In their distribution they resemble that which occurs in Coniferæ of the second class. The author considers secretory canals to be the highest degree of development of the secreting organs of plants.

Parasitism and mode of Propagation of Lichens.—Two important papers on this subject appear in the *Annal. des Sciences Nat. (Botanique)* for November, 1872. Janczewski, in a paper on the Parasitism of *Nostoc lichenoides*, refers to the fact that what were at one time described as the "bulbils" of *Anthoceros levis* are now generally acknowledged to be small collections of a *Nostoc* parasite on the tissue of the leaf. They are still, however, considered by Hofmeister to be the organs of reproduction of the *Anthoceros*, although he never

saw them escape from the parent plant. The writer found stomata on the under side of the frond of *Anthoceros*, which had not before been observed; the upper surface of the frond being entirely destitute of these organs. It is these stomata that are attacked by the *Nostoc*, and the writer succeeded in artificially inoculating them with the parasitic alga. The same parasitism was observed of the *Nostoc* on the leaves of *Blasia pusilla*; and the same parasite was found to attack the largest of the two kinds of cells of which the leaf of *Sphagnum acutifolium* is composed. The alga is also parasitic on the rhizome of *Cycas* and of *Gunnera scabra*. The second paper is by Woronin, *Researches on the Gonidia of the lichen Parmelia pulverulenta*. He confirms the previous observations of Famintzin and Baranetzky that the gonidia of this lichen and of *P. parietina* produce zoospores, which he describes as bi-ciliated, and gives an exact account of their mode of escape from the gonidia. These zoospores, after the cessation of their vibratile motion, caused by the cilia, become covered by a membrane after the ordinary manner of the zoospores of Algae, and form themselves into gonidiform bodies, increasing by division, but producing neither filaments nor hyphæ, but only giving birth to new gonidia; in other words, to young individuals of a unicellular alga of the genus *Cystococcus*. This observation of the actual germination of the zoospores he states to be a link in the chain hitherto wanting. Woronin sums up strongly in favour of Schwendener's much disputed theory that Lichens are not independent organisms, but are composed of Fungi parasitic upon Algae (the so-called gonidia), though he considers a further series of very careful experiments will be necessary either to prove or disprove the theory. Both papers are beautifully illustrated by plates.

Introduction of Loranthus Europæus into Ireland.—This parasite, belonging to the same natural order as the mistletoe, is well known in the south of Europe, but attempts to introduce it into this country have hitherto failed. Dr. David Moore, the curator of the gardens of the Royal Dublin Society at Glasnevin, has at length succeeded in growing it on two species of oak. The methods hitherto attempted had been by either placing the seed of the parasite outside the bark or beneath the epiphloeum or endophloeum, resting on the alburnous wood, but these had not been successful. It occurred to Dr Moore to bruise gently the soft bud on a young shoot of the previous year, and to insert the seed of the parasite in the centre of the partially bruised young bud; and by this method two of the seeds germinated, the seeds remaining dormant and only covered over with their viscous gelatine for more than a twelve-month after their insertion before they began to shoot. The following parasites are also now successfully grown in the Glasnevin Gardens:—*Orobanchæ Hedera* and *minor*, *Lathræa squamaria*, and six species of *Cuscuta*, as well as the mistletoe, which is not a native of Ireland.

A New Potato-disease.—E. Hallier describes in the *Zeitschrift für Parasitenkunde*, 1873, Bd. 4, Heft 1, a new potato-disease which has appeared in the crop at Apolda, near Jena. The disease differs from the one ordinarily known in this country in attacking at once the tubers and not the leaves. The tuber is found to be covered by a purplish felt, which is the mycelium of a fungus; the skin of the potato is in some cases apparently not penetrated by this mycelium, while in others close examination with the microscope shows that it is, the skin being in these cases covered by a number of black spots having the appearance of the perithecia of a pyrenomycetous fungus, the tuber becoming then completely destroyed by a cancerous disease; the fungus, which probably belongs to the genus *Sclerotium*, appearing always to accompany the disease. Prof. Hallier thinks that the remedy will probably be the same as in the ordinary potato-disease, selecting early kinds, using only mineral and no animal or vegetable manures, and a careful selection of the best adapted soil. At Apolda the geological formation is the Keuper; the past summer was remarkably dry, the disease appearing in the autumn.

Physiology.

Special mode of Development of certain Batrachians.—In a letter printed in the *Revue scientifique*, No. 37, 1873, M. Jules Garnier communicates some remarkable observations that have been made by M. Bavy on certain Hylodes which exist in large numbers in the Island of Guadaloupe. These animals are widely distributed over the island, being found not only near the sea, but in the higher lands of the interior, and after rain their croak makes the air resonant. The physical features of Guadaloupe, a volcanic island the soil of which is composed of tufa, pozzuolana, and similar material, are so peculiar and so very unfavourable for the maintenance of tadpole life, which is essentially piscine, that M. Bavy was led to expect the existence of some peculiarities of development. The ova were easily procured, as they were everywhere present under moist leaves. No tadpoles could be discovered, but many of the frogs were of an extraordinarily minute size. The eggs were spherical, with a diameter of from three to four millimeters, and were each provided with a small spheroidal expansion resembling a hernia of the gelatinous mass through a pore in the envelope. In the centre of the sphere the embryo was visible, lying on a vitelline mass of a dirty white colour, and having a thin body, a large head, and four styliform

members with a recurved tail. When the egg was touched the embryo moved rapidly and changed its position. A day later the embryo was perfect, coloured, with a tail as long as the body, translucent, and like that of a tadpole. The limbs immediately formed, and at the expiration of a few days little frogs of a dark greyish brown colour, and *without a vestige of a tail*, escaped from the egg. M. Bavay's observations have established the following facts:—1. That this *Hylodes martinicensis* commences life by a rotatory movement of the future embryo. 2. The fully formed embryo performs the rotatory movements more rapidly, but in a horizontal plane. 3. The branchiae make their appearance, and again vanish sometime afterwards. 4. The larva in the ovum is provided with a tail and limbs. 5. The tail of the larva not only facilitates the movements of the imprisoned animal, but also aids respiration by the numerous and minute vessels which ramify in this highly developed appendage. 6. The animal issues from the egg in the form which it preserves throughout life. As M. Garnier observes, these observations seem to constitute a starting-point for a special investigation of great importance, and have a close relation to the question of the adaptability of species to surrounding conditions. It may be asked in this case whether the frog has been created with special modifications adapting it to live in an island destitute of marshes, or has it in course of time acquired a new mode of development enabling it to survive under the exceptional conditions under which it has been placed?

Histology of the Retina of the Horse.—C. Golgi and N. Maufredi (*Giornali della R. Acad. di Med. di Torino*, August, 1872, abstract in *Centralblatt*, February 1st, 1873) state that if the fresh eye of the horse be macerated in dilute (0.25 to 0.75 per cent.) solution of bichromate of potash, or of chromic acid (0.05 to 1.10 per cent.) the retina separates from the swollen layer of the rods and cones and the layer of outer granules, and splits with great readiness into three laminae. The innermost of these is composed of the optic fibre layers, to which here and there a ganglion cell is adherent. The middle lamina is composed of a layer of grey substance, in which a large number of ganglion cells are imbedded together with the adjoining part of the internal granule layers. The third and outermost lamina is composed of a part of the internal granule layer, together with the intergranule layer. Intercalated in the first named lamina the authors find numerous branched connective tissue cells closely resembling the interesting cell—elements described by M. Golgi in the central organs of the nervous system. In the second lamina these connective tissue cells are likewise very frequent. The intergranule layer of the third lamina consists chiefly of large cells of very irregular form. They are so flattened as to form very thin transparent lamellae of homogeneous or finely granular aspect and very delicate margins. Their processes are extraordinarily numerous, which appear to be for a considerable distance mere prolongation of the cell body; but their extremities are highly refractile and homogeneous, and present varicosities like those of the optic fibres. The processes of adjoining cells anastomose freely and form a compact network or felt. Besides these typical cells other smaller but likewise flattened cells are found in the intergranule layer. These are highly granular and have fewer processes.

Regeneration of the Eyes in the Crab.—At the meeting of the Académie des Sciences of Paris, 27th January, 1873, M. Chautran read a paper detailing some experiments which he had made, in M. Coste's laboratory, upon the regeneration of the eyes of the crab. Considerable differences occur in the perfection of the regenerative process, and depend both on the age of the animal and the relation of the operation to the period of moulting. After the eyes had been removed from a crab one year old, and captured in August, just after the moulting of the shell, they were perfectly restored, the new ones assuming the normal form and functions. If, however, the operation be performed on one taken in the month of May before moulting, the process of regeneration is seriously interfered with by the casting of the skin; the eye is then regenerated of abnormal form and size. In adults, again, the new organ is very imperfect.

The Poison of Pahonim.—This poison, obtained in the Gaboon district, acts, according to MM. Carville and Polaillon,* extremely energetically upon the heart, five milligrammes of the impure alcoholic extract being sufficient to kill a dog weighing fifty-four pounds. It produces death by arresting the action of the heart, and this effect is produced by the abolition of the contractility of the cardiac musculature in the first instance and subsequently of the other muscles. When introduced into the pericardium it stops the action of the heart more rapidly than when the same quantity is injected. It does not abolish the excitability of the nerves. It kills without apparently affecting either the great sympathetic, the encephalon, the spinal cord, or the pneumogastric. It acts feebly on a curarized frog, but there is no antagonism between the curara and the poison. It acts less swiftly by absorption through the stomach than by cutaneous absorption. As compared with digitaline

and antiarine, the oily and uniform extract of the poison acts more rapidly than the same weight of the crystallized principles of digitalis and of the *Upas Antiar*, but the marked effects are later in appearing. It interferes with the movements of the heart of the snail and ends by killing it, whilst this effect cannot be produced by digitaline. It causes vomiting in the higher animals.

Action of Muscles determined by Electricity.—In a recent number of the *Mouvement médical* (see abstract in the *Medical Record*, March 5th, 1873) Dr. Onimus gives the results of some experiments he was permitted by the authorities to make on the body of a criminal who had been guillotined. He found that by acting upon the intercostal muscles the external intercostals elevate the ribs, while the internal intercostals depress them. This is best seen when the upper rib of the intercostal space which is faradized is fixed; the lower rib is then raised, while if the internal intercostals be faradized it remains in the same position. The action of the external seems to be more powerful than that of the internal muscles. The Peroneus longus depresses the internal edge of the foot and acts slightly as extensor and abductor of the foot, as shown by Duchenne, of Boulogne. M. Onimus was unable to efface the vault of the sole of the foot by the action of the tibialis anticus. Muscular contractility is not lost simultaneously in all the muscles. The first muscles to lose their excitability are the diaphragm and the tongue, and after them come the facial muscles. The masseter retains its faradic excitability longer than any other muscle of the face. In two and a half to three hours after death the contractility is quite lost in all of them. In the limbs the extensor muscles go first; the flexors retain their sensibility about an hour longer. Five or six hours after death the muscles of the trunk still answer to faradization; the abdominal muscles are more especially tenacious in this respect. This corresponds to the fact that in more or less general palsies these muscles are the last to become affected, and it is well known that in many forms of paralysis the extensors suffer more severely and sooner than the flexors. As the muscular contractility becomes enfeebled the way in which the contraction presents itself becomes altered. The substance of the muscle appears to rise first at the points of contact with the electrodes, while the intermediate part responds very slowly; it gradually declines, and in time ceases to answer at all, although a response still takes place at the electrodes. At this stage the muscles do no longer answer to percutaneous faradization, but may still respond to the same stimulus directly applied to their tissue.

The Innervation of the Lacrymal Gland.—This subject has recently been investigated by Dr. Demtschenko, who has published his results in *Pflüger's Archiv* for September, 1872. His experiments were conducted on dogs, cats, and rabbits rendered insensible by means of morphia. The stimulus applied was an induced current of electricity. The quantity of fluid secreted by the lacrymal glands was estimated by the number of square centimeters of blotting paper that were moistened. Some differences in the mode of experimenting were found to be required in the different animals. In the dog and cat the lacrymal nerve could be reached from the orbit, but in the rabbit the skull had to be opened. M. Demtschenko found that no influence upon the activity of the lacrymal gland was exerted by the temporo-malar nerve, but the secretion was augmented by irritation of the sympathetic nerve. Irritation of this nerve renders the conjunctiva moist even when the lacrymal gland had previously been excited. The increased flow of tears which follows irritation of various cranial nerves, such as the frontal, infraorbital, nasal, lingual, glossopharyngeal, and pneumogastric, is not interfered with by section of the sympathetic, but is immediately checked by section of the lacrymal nerves. Chloroform narcotisation does not prevent the manifestation of this reflex action. Some differences are presented in the character of the secretion according to whether the sympathetic or the fifth nerve is irritated, being cloudy in the former case, limpid, clear, and abundant in the latter. The sympathetic nerve seems to maintain the normal degree of moisture of the eye, and the fifth the flow of tears, since in cases of paralysis of the latter nerve the conjunctiva remains moist, but the power of shedding tears is lost. Ligature of the carotid artery materially diminished, whilst ligature of the jugular vein augmented, the flow of tears following irritation of the lacrymal nerve. All conditions producing dyspnoea led to increased flow of tears.

Function of Lingual and Chorda Tympani Nerves.—The lingual of the fifth pair of nerves has always been regarded as a purely sensory nerve. It has lately been shown, however, that after section of the hypoglossal or proper motor nerve of the tongue, stimulation of the lingual causes movements of the tongue. M. Vulpian, who has recently studied this subject, has laid the results of his investigations before the Académie des Sciences, at the meeting held on the 20th January, 1873. M. Vulpian satisfied himself that some of the fibres of the chorda tympani nerve terminate in the submaxillary gland, but that others are certainly distributed to the tongue. He ascribes to them the singular motor power which the lingual appears to acquire after the section of the hypoglossal. He is therefore still of the opinion that the lingual is a purely sensory nerve, but he is unable to explain why the fibres of

* MM. Carville et Polaillon On the Poison of Pahonim. A Paper read before the Society of Biology of Paris, and printed in abstract in the *Revue scientifique*, Vol. ii. Ser. ii., p. 527.

the chorda should apparently acquire a motor power after the section of the hypoglossal.

Geology.

Mammoth Remains in Wrangel-land.—In 1872 a party of Americans, led by F. Pavy, left San Francisco to endeavour to reach Wrangel-land, in the Arctic Sea. They landed near the mouth of a large river running from the N.W., and about eighty miles inland observed many indications of Mammoth remains. On clearing away the snow from one of the spots the whole of a well-preserved animal of this genus was exposed to view. The head was beset with long thick white hair, and the tusks, eleven feet eight inches in length, were curved backwards towards the eyes. The animal was in a kneeling position, the hinder part of the body being deeply buried in the snow, and in such an attitude as it would take if it had died whilst endeavouring to extricate itself from the bog. In its stomach were found bark and grass. These remains were distributed for miles over the plain, and were so abundant that it appeared as if a numerous herd had perished there. The place swarms with polar bears, which live upon the bodies.—(*Verhandl. der Geolog. Reichsanstalt zu Wien.* 1873. No. 4, p. 71.)

Quaternary Fossils of Louverné, Mayenne.—M. A. Gaudry (*Compt. Rend.*, 1873, vol. 76, 657) has examined a number of fossils found in a cave in the carboniferous limestone at Louverné by M. Cellert. They consist of four human molars belonging to as many individuals of different ages, the upper portion of a humerus of a man of large stature, a horn of reindeer with an incision evidently made by human hands, and numerous bones which are referred to the following species, *Hyæna spelæa*, a large *Canis vulpes*, *Rhinoceros tichorhinus*, *Equus caballus*, *Tarandus rangifer*, and the bison. Most of the bones were broken and had been much gnawed by animals. At a distance of 800 mètres from this cave, and in the same rock, a cavity was broken into which was filled with yellow earth, rolled pebbles, large blocks of limestone, and a great many bones. The latter are characteristic of the mammoth epoch, and in addition to the species found in the cave consist of *Felis spelæa*, *Mustela foïna*, *Meles taxus*, *Arctomys marmotta*, a large hare which may be either the *Lepus timidus* or *L. variabilis*, *Sciurus vulgaris*, *Elephas primigenius*, *Sus scropha*, a stag as large as the *Megaceros Hibernicus*, some bovidæ of the same size as those named *Bison prisus* and *Bos primigenius*. M. Milne-Edwards has recognised among the bird remains the genera *Anser*, *Mergus*, *Nictæa nivea*, two species of *Anas*, and a femur of an unknown species of the hawk family larger than the buzzard and smaller than the *Aquila audax*. The mammoths were chiefly recognised by the teeth, the fragments of the limbs and particularly the vertebrae being so gnawed by hyenas and other animals as to be almost indeterminate. From the prevailing longitudinal fractures in the bones M. Desnoyers and others are of opinion that they are the remains of human feasts, but M. Gaudry considers that having regard to the very numerous marks of the teeth of animals it would be rash to attribute them to human agency.

The Rocks of Griguland West.—Dr. E. Cohen in his second letter to Prof. Leonhard (*Fahrbuch für Mineralogie*, 1873, part i., p. 52) gives a brief account of the rocks of Griguland West. In the immediate vicinity of Hoptown the prevailing rock is of a greyish green colour and fine-grained to compact texture, not admitting of a ready determination of its mineral constituents. It is largely developed along the line of the Vaal, being in some places amygdaloidal, and forms high ranges and low plateaus very distinct from the table mountains and kopjes of the Karoo formation. Near Klipdrift a large-grained rock makes its appearance consisting of hornblende and a triclinal felspar, with ilmenite and a little quartz. It bears great resemblance to many of the diorites of Alsace and the Odenwald, to which group, it is probable, the close-grained rock will be found to belong. Dr. Cohen regards the crystalline variety as of later date than the close textured, having observed it near Klipdrift overlying shales and to be traversed by vein-like masses of conglomerate, and near Eskdale on the Orange River it covers and is covered by thick deposits of quartzite sandstone, proving its intrusion during their deposition. On the other hand the compact "Vaal rock" never overlies any sedimentary or other beds in the large district already examined. The sedimentary rocks are quartzite sandstone, slaty clay and conglomerate, limestone with laminated siliceous and marly bands, and a so-called jasper-slate; no fossils have yet been observed in any of them. Marly slate, with siliceous limestone overlying it, constitutes the plateau upon which Grigula-Town is situated. It runs parallel with the Vaal and the Hart rivers for 150 miles, the whole of the intervening plain being covered with thick deposits of conglomerate and the ever-present calc-tuff. The jasper-slate rises above Grigula-Town, and Dr. Cohen regards it as a continuation of that of the Asbestos mountains, and to be a completely altered sedimentary deposit. It contains bands of magnetite and fibrous quartz, but the crocidolite of the former locality appears to be wanting.

The Granulite of Auerswalde.—The granulite rock of Auerswalde, in Saxony, consists of normal granulite, which is made up of orthoclase

and quartz, with accessory garnet and kyanite, traversed by bands of "trap-granulite," which is a mixture of a triclinal felspar with quartz, magnetite, and a green, mica-like mineral. This interlamination, which was pointed out by Stelzner as evidence of the metamorphic character of this rock, is regarded by Prof. Naumann (*Fahrbuch für Mineralogie*, 1872, Part 9, 911) as strong evidence of its eruptive origin. After describing the relation of the granulite to the mica-slate, as observed in several quarries and escarpments in the Chemnitz valley, between Wittgensdorf and Garndorf, he proceeds to compare the alternations of varieties of this rock with modern eruptive masses that have been met with in the Island of Ponza, at Bassiluzzo in the Lipari Islands, at the Cerro de las Nabajas, Mexico, the perlite district of Hungary, and the well-known Piperno, near Naples, &c., all of which exhibit alternations of beds or sheets of two dissimilar varieties of the same lava. Still stronger indications of the eruptive origin of these gneissoid rocks are furnished by the fragments of mica-slate, which often occur in the granulite, with their parallel lines of lamination folding over the irregular surfaces of the angular fragments, and producing in the granulite an undulating appearance; similar evidences of flowing-over wedge-shaped projections of mica-slate, often presenting nearly perpendicular sides, occasionally exhibit themselves in the quarries of the district.

Prof. Fr. Müller's long expected work, *Allgemeine Ethnographie*, will be out in a few days at Vienna. From the many-sided learning of the Vienna professor it may be inferred that it will make an epoch, as Prichard's *Natural History* did in its time.

M. Gaidoz is engaged on a work on the Slavonian race in the German Empire and on the German race in Russia, being the enlargement of two lectures of his on the ethnography of Europe which he teaches at the Paris Ecole Libre des Sciences Politiques.

The only Norwegian who has ever attained eminence by writing on general physics, Professor Hartwig Christie, has died suddenly in Christiania. He was born in 1826.

New Publications.

- ACADEMIE ROYALE DE BELGIQUE. Centième Anniversaire de Fondation (1772-1872). Tome premier et tome seconde. Bruxelles: Hayez.
- BAILLON, H. Histoire des Plantes. Monographie des bixacées, cistacées, et violacées. Paris: Martinet.
- BISCHOFF, T. L. W. v. Anatomische Beschreibung eines microcephalen 8-jährigen Mädchens. München: Franz.
- COOKE, M. C. Manual of Botanic Terms. Williams & Norgate.
- COTTY, E. Description du musée d'histoire naturelle et du jardin botanique et zoologique de Tours. Amiens: Lenoel-Heronart.
- DAMMANN, C. Anthropologisch-Ethnologisches Album in Photographien. 1^{re} Lieferung. Berlin: Wiegandt und Stempel.
- DE SEYNES, J. Expériences physiologiques sur le pencillium glaucum. Paris: Martinet.
- DEBAT, L. Essai sur la constitution de la matière et l'essence des forces dans l'ordre physique. Lyon: Regard.
- DE GIRARD, J. Les matières glucogènes et les sucres au point de vue chimique et physiologique. Montpellier: Boehm.
- FRITSCH, A. Cephalopoden der Böhmisches Kreideformation. Prag: Rziwnatz.
- GERMER-DURAND, E. Découvertes archéologiques faites à Nîmes et dans le Gard pendant l'année 1870. Nîmes: Clavel-Ballivet.
- HANDELMANN, H. Die antlichen Ausgrabungen auf Sylt, 1870, 1871, und 1872. Kiel: Schwes.
- HILLEBRAND, K. Frankreich und die Franzosen in der zweiten Hälfte des 19ten Jahrhunderts. Berlin: Oppenheim.
- HILGER, A. Mittheilungen aus dem chemischen Laboratorium von Dr. Hilger. Würzburg: Stuber.
- KÖHLER, H. Die lokale Anaesthesirung durch Saponin. Halle: Pfeffer.
- KORNHUBER, A. Ueber einen fossilen Saurier aus Lesina. Wien: Hof- und Staatsdruckerei.
- LAMPE, C. J. H. Allgemeine Bemerkungen über die Bewegung des Wassers in Röhren. Danzig: Anuth.
- LEDER, H. Erster Nachtrag zu E. Ritter's Uebersicht der Käfer-Fauna von Mähren und Schlesien. Brünn: Hauptmann.
- LISSAUER, R. Alt-pommerellische Schädel. Ein Beitrag zur germanischen Urgeschichte. Danzig: Anuth.
- LISTING, J. B. Ueber unsere jetzige Kenntniss der Gestalt und Grösse der Erde. Göttingen: Dieterich.
- MACH, E. Ueber stroboskopische Bestimmung den Tönhöhe. Wien: Gerold's Sohn.
- MANSION, P. Note sur la première méthode de Brisson pour l'intégration des Equations linéaires aux différences finies ou infiniment petites. Bruxelles: Hayez.
- MAXWELL, J. C. Treatise on Electricity and Magnetism. 2 vols. Macmillan.
- MÜLLER, H. Die Befruchtung der Blumen durch Insekten und die gegenseitigen Anpassungen beider. Leipzig: Engelmann.

- PÉRIGOT, C. Géographie physique et politique de l'Europe. Sceaux : Charaire.
- PICHOT, P. A. Le Jardin d'Acclimation illustré. Paris : Hachette.
- POMEL, A. Le Sahara. Observations de géologie et de géographie physique et biologique, avec des aperçus sur l'Atlas et de Soudan. Alger : Aillaud.
- RATHSCHLAGE für anthropologische Untersuchungen auf Expeditionen der Marine. Auf Veranlassung des Chefs der Kaiserlich. Deutschen Admiralität. Ausgearb. von der Berliner Gesellschaft für Anthropologie. Berlin : Wiegand und Grieben.
- REICHENBACH, H. G. Xenia orchidacea. Beiträge zur Kenntniss der Orchideen. 2^{er} Band. 8^{er} Heft. Leipzig : Brockhaus.
- REYE, T. Die Wirbelstürme. Hanover : Rümpler.
- ROSTAFINSKI, J. Floræ Polonicae prodromus. Berlin : Friedländer.
- SADEECK, A. Ueber Fahlert und eine regelmässigen Verwachsungen. Berlin : Friedländer.
- SATTEL, L. Application de la transformation argésienne à la génération des courbes et des surfaces géométriques. Bruxelles : Hayez.
- STEIN, S. T. Die Trichinenkrankheit und deren Auftreten zur Frankfurt a. M. im Januar, 1873. Frankfurt : T. Aufarth.
- THOMSON, Sir W. and TAIT, P. G. Elements of Natural Philosophy. Macmillan.
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- VOGELSANG, H. Ueber die Systematik der Gesteinslehre und die Eintheilung der gemengten Silikat-Gesteine. Bonn : Cohen.

Philology.

Early Eastern Geography.—*Bibliotheca Geographorum Arabicorum.*—Edidit M. J. De Goeje. Pars secunda. Vix et Regna. Descriptio dititionis Moslemice, Auctore Abu 'l Kâsim Ibn Haukal. Lugduni Batavorum : apud E. J. Brill. 1873.

IN accordance with Prof. De Goeje's promise, Ibn Haukal now follows Istakhri as the second volume of the *Bibliotheca Geographorum Arabicorum*. As we showed at the time, according to De Goeje's researches (*Academy*, Oct. 1, 1871), the work of Ibn Haukal is an enlarged and corrected edition of Istakhri's book. The present edition enables every one who knows Arabic to verify for himself the relation of the two geographical works. We see that Ibn Haukal has incorporated almost the whole of Istakhri, more or less literally, in his own work without distinctly stating the fact : the ideas of the time respecting literary property differed essentially from those now prevalent. But he has made so many trifling alterations in the text of his predecessor, even when adopting it as a whole, that it would be extremely difficult, if not impossible, to show the difference between the two texts in a single edition with the help of critical notes and variants. It is far more convenient to be able to lay the two texts side by side, even in passages where they agree in essentials. A formidable critical apparatus is still, however, made necessary by the differences between later versions as well as by the carelessness of copyists. But the later work has very decided points of superiority to its original. Ibn Haukal had seen much in the course of his travels, and many of the results of his observations are included in the work. The most cursory inspection shows us how much more extensive some sections are than in Istakhri (in connection with which it may be remarked that in the edition of Ibn Haukal there is decidedly more text to a page than in that of Istakhri, where the critical portion occupies more space), and these additions are for the most part valuable. Some of the Western countries which are only scantily noticed by Istakhri are described in greater detail by Ibn Haukal ; as for instance Egypt and the rest of North Africa, Moslem Spain, and the Christian coasts of the Mediterranean. The account of Mesopotamia has also been a good deal enlarged, and unfortunately in a less degree that of Syria and Babylonia (Irak). Ibn Haukal, amongst other points, had taken much pains to procure careful information respecting the finances of different

countries and provinces, which are not wanting in sad indications of the decline of material prosperity. For most readers his lists of figures are certainly rather unintelligible ; but if a competent scholar were to undertake to examine more nearly into the nature and history of the state finances in the first centuries of Islam, he would find much valuable matter amongst the *data* furnished by Ibn Haukal as well as Belâdhori and other writers. Ibn Haukal pays particular attention to political conditions, and in this way furnishes a very welcome supplement to the historians. In his time (middle of the tenth century, A.D.) it might appear to a careful observer as if the might of Islam were drawing to its end. With the abasement of the Caliphate, which had already lasted for a century, the strength of the Arabs was really broken. Countries which had been conquered in the first centuries after the Hejira were lost to the Greeks or were devastated by their incursions. The leaders of Turkish mercenaries, Persian adventurers, and small Arabian dynasties, contended for the countries on the banks of the Tigris and Euphrates. Amongst the latter the Hamdanides stand pre-eminent. We are accustomed to regard the most intellectually distinguished member of this stem, Saif-Addaula, as the glory of his people, the light in which he is celebrated by the court poet Motanabbi, while the literary tradition of the Arabs is also very favourable to the generous prince, protector of the *beaux esprits* of his time, and himself possessed of high accomplishments. A very different account, both of him and the other Hamdanides, is given by the sober contemporary Ibn Haukal : how they ruined the cities by their extortions, forced the inhabitants to emigrate, or actually drove them into the arms of the Greeks and of Christendom. If one takes the bare facts set down by the chroniclers, the wars of the Hamdanides against foreign enemies and against each other, and their faithless policy, one is compelled to admit the justice of Ibn Haukal's severe verdict, even though it might be urged in excuse of Saif-Addaula that a petty prince who had constantly to contend for existence against both Greeks and Moslems could not be very scrupulous as to the choice of means for replenishing his war-coffers ; while his brother, Nâsir-Addaula, was compelled to follow a system of ruinous exactions by the sole weight of the tribute to be paid to Bagdad. But, everything considered, we have here a picture of a deplorable state of things of which we have no conception at all in reading Motanabbi, and we can understand the melancholy tone which appears in Ibn Haukal's description of northern Syria and Mesopotamia. He could not know that the Greek Empire was too miserably weak to maintain and follow up its advantages over the Moslems, and that Islam was about to derive new strength, at least for conquest and destruction, from the influx of the Turkish hordes. Ibn Haukal, however, is a zealous partisan of the Fatimides, whose power was just attaining fuller development. This house, whose descent from Ali was in all probability mythical, understood better than most of the other real and imaginary Alides how to lay the foundations of a State and cause it to flourish. We cannot, therefore, take it amiss that our author turned towards them. But I am inclined to doubt whether he himself was at all a Shîte so far as religious matters were concerned ; expressions like that of "so-called caliphs" for the Abbasides are at any rate to be regarded rather as an affectation than as meant seriously. What Ibn Haukal has to say about the non-Moslem world, except so far as it is to be found in Istakhri as well, is not of much special value, though even here a few interesting particulars may be met with, as for instance those relating to the great conquests of the Russians on the East and South (p. 286).

Though Ibn Haukal's changes in the text of Istakhri are

generally for the better, this is not the case quite always. Thus Istakhri says that the Kurds assert themselves to be of Arab descent (p. 115); he plainly does not believe it, but Ibn Haukal supports the absurd claim by the authority of the learned Ibn Doraïd, who ought not to be contradicted (p. 187); it looks as if he had here wished to display his own learning.

No doubt Ibn Haukal would have considered it as one of the chief superiorities of his work over that of Istakhri that his maps were better. But on this point we could only judge if the original maps were before us, for they have been much disfigured in different MSS. We observed in speaking of the edition of Istakhri that Prof. De Goeje had done well in omitting the maps altogether.

Ibn Haukal's style is not always to be commended. He often expresses himself obscurely, and though, after the intolerable fashion of learned Arab authors, he frequently speaks in artistic flourishes with rhymes when simple prose would be more to the purpose, yet he has some peculiarities of style which are actually against the rules of good Arabic. Amongst these I reckon his rather frequent use of *ghair* with an indeterminate substantive in the sense of "several:" viz., *ghairu 'ainin* (p. 150) "not a spring," in the sense of "not one spring," that is to say "several springs."

Like the original work of Istakhri, Ibn Haukal's version has been in many respects altered and abridged; evidence of this is given partly by the Arabic MSS. themselves, partly by Persian translations. It is not always easy to say with certainty which is the text of Istakhri, which of Ibn Haukal, and which of the later editor. De Goeje has proceeded in this matter, as ever, with the greatest caution, though he would not claim to have distinguished with perfect exactitude between the two original texts. By the very ample critical apparatus afforded he enables the qualified reader to form his own opinion. We are particularly grateful to the editor for giving the in parts very interesting additions made to our book in a fresh version of two hundred years later, which is contained in a MS. at Paris. This reviser observes, for instance, with respect to many places of which Ibn Haukal says that they have fallen into decay, that in his time—and he generally adds the date—they are again in a flourishing condition. But this writer must have had yet another text of the original before him, and one with considerable differences from the common form. It is particularly strange to find at the beginning of the Parisian MS. a warm eulogium on Saïf-Addaula, which is entirely at variance with many other passages of the book. It seems to me a question whether this passage may not have belonged to an earlier version by Ibn Haukal's own hand. The matter, at any rate, is worth investigation.

We await anxiously the third volume of this series, which is to contain Mokaddasi, a publication by which Professor De Goeje will be doing as meritorious service as by that of Balâdhori, Istakhri, and Ibn Haukal.

TH. NÖLDEKE.

Fridankes Bescheidenheit. Von H. L. Bezzenberger. Halle: Verlag des Waisenhauses.

Kudrun. Hgg. und erklärt von E. Martin. Halle: Verlag des Waisenhauses.

WHEN we consider the great progress which the study of modern German literature has made in this country during the last few years we cannot but be struck by the almost total neglect of the Middle High German literature of the twelfth and thirteenth centuries. And yet the earlier is at least equal in interest to the later period, although its merits are of a totally distinct order—whence, indeed, its great value

as a corrective and supplement to the modern literature. It may safely be said that any one who acquires a thorough—not a merely superficial—knowledge of the two periods will possess a breadth and fulness of literary culture otherwise attainable only by a laborious study of several distinct languages. The nearness of the two periods, while sparing the student to a great extent the drudgery of learning a new vocabulary and grammar, yet offers peculiar difficulties, arising from this very similarity. It often happens that a word in the older language differs in meaning from its modern equivalent so slightly as often to entrap the superficial student into hastily assuming a complete identity of meaning, the result being a ludicrous mistranslation. The study of MHG. is thus an excellent training in the differentiation of word-meanings.

The title of the first of the two works now under discussion is a good example of this change of meaning. "*Bescheidenheit*" in MHG. has nothing to do with "modesty;" it means simply "wisdom," or rather "sagacity," afterwards "*moderation*," "*reasonableness*," whence the modern signification. "*Fridankes Bescheidenheit*" means therefore "*Wisdom of Free-thought*," the "*wisdom*" consisting in a collection of short proverbial sentences in rhymed metre, whose subjects are drawn from every sphere of practical life, from religion and the world of nature. Who *Freidanc* himself was has long been a disputed question. It was at first assumed that *Freidanc* was an assumed name, and the first critical editor, Wilhelm Grimm, conjectured that the real author was the great lyric poet Walther von der Vogelweide. This theory was never generally accepted, and after the masterly summary of the evidence on both sides given by Bezzenberger in his introduction, its untenability must be regarded as put beyond a doubt. Indeed when we see how fundamentally distinct the genius of the two poets is, and how impossible it is to reconcile the purely objective and practical tone of the *Bescheidenheit* with the intense subjectivity, passion, and idealism of Walther, we can only wonder that such a hypothesis could ever have entered the head of so sagacious a critic as W. Grimm. The scanty evidence there is tends to show that *Freidanc* was the real name of the author, that he was of citizen family, led a wandering life, visiting Italy and the Holy Land, and died at Treviso about 1240. It only remains to be said that the present edition is, with its elaborate introduction, rhyme-index, and commentary, suited alike for the critical and the general reader. A better work for any one who is beginning the study of Middle High German could hardly be found.

With the *Gudrun* we enter on a totally new field of Middle High German literature, the national epos. It is characteristic of the wonderful breadth and many-sidedness of the literature that it possesses two distinct classes of epic poems—the popular, founded on the national traditions, and the "courtly" (*höfisch*), whose subjects are taken from the Old French epics. Of the popular epics the *Nibelungen* unquestionably deserves the first place, the *Gudrun* coming second. As far as its internal structure is concerned the *Nibelungen* stands without a rival in general literature for grandeur of conception, tragic power, and fine development of character. Formally, however, it is far from perfect, having suffered severely from the interpolations and alterations of meddling scribes. The same is the case, only in a still higher degree, with the *Gudrun*, which has been preserved only in one very corrupt MS. of the sixteenth century. Enough, however, remains to make the *Gudrun* one of the most fascinating of all MHG. epics. It no doubt owes much of its charm to its peculiar relation to the *Nibelungen*, which is exactly parallel to that of the *Odyssey* to the *Iliad*, although the story of *Gudrun's* unshaken fidelity to Herwig, on which

the poem mainly turns, is told with a purity and elevation of feeling to which the Greek was a stranger. The present edition, which forms the second volume of Zacher's Germanistische Handbibliothek, gives the readings of the MS. at the foot of each page together with critical notes. The whole work is better adapted for the advanced student than for the beginner, who cannot have a better edition than that of Bartsch in the "Deutsche Classiker des Mittelalters" (see *Academy*, vol. iii. p. 221). H. SWEET.

New Publications.

- ASCOLI, G. I. Archivio Glottologico Italiano. Vol. I. Con una carta dialettologica. Rome: Loescher.
 BAUMGART, H. Pathos u. Pathema im Aristotelischen Sprachgebrauch. Königsberg: Koch.
 KÖLBING, E. Untersuchungen über den Ausfall des relativ-Pronomens in den germanischen Sprachen. Strassburg: Seitz und Miller.
 LITTRÉ, E. Dictionnaire de la langue Française. 4 vols. Hachette.
 MURRAY, J. A. H. Treatise on the Dialect of the South of Scotland. (Transactions of the Philological Society for 1870-2. Pt. ii.)
 NEUMANN, W. Melanges Philologiques. I. Prononciation du C Latin. Paris: Sandoz et Fischbacher.
 POTT, A. F. Etymologische Forschungen. 2^{te} Auflage. 4^{ter} Band. Detmold: Meyer.
 SAUPPE, H. Commentatio de amphictionia delphica et hieronemone attico. Göttingen: Dietrich.

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